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# 1981 Annual Technical Report of the National Plant Materials Center

A Summary of the Activities  
of Calendar Year 1981







THE  
NATIONAL PLANT MATERIALS CENTER  
1981 ANNUAL TECHNICAL REPORT

A SUMMARY OF THE ACTIVITIES  
OF CALENDAR YEAR 1981

SOIL CONSERVATION SERVICE  
U. S. DEPARTMENT OF AGRICULTURE  
BELTSVILLE, MARYLAND



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National Plant Materials Center  
Soil Conservation Service  
United States Department of Agriculture

Introduction

In 1981 the National Plant Materials Center marked its 43rd year of service to the Soil Conservation Service plant materials program as an introduction, exchange and observation center for grasses, legumes, trees and shrubs with potential value in soil and water conservation. All plant materials from foreign countries used in the SCS are processed through this center for initial seed increase and observation. An average of 1,000 new plant accessions per year are introduced through this center and distributed to 22 field plant materials centers throughout the United States, including Alaska, Hawaii and Puerto Rico.

Only a few plants distributed from this center through the 22 field plant materials centers eventually are used to help farmers, ranchers, cities and urban communities solve the problems of watershed protection, gully control, shelter belts, wind-erosion control, wildlife borders, and surface-mined land reclamation.

Purpose and Objectives

The National Plant Materials Center is the central facility for assembling, increasing and distributing plant materials from foreign sources that may be useful in helping to solve conservation problems established in the long-range program of the field plant materials programs.

Facilities

Location:

The center is located on the Beltsville Agricultural Research Center, Beltsville, Maryland. This location is approximately fifteen miles east of the District of Columbia and twenty miles west of Baltimore, Maryland.

Although surrounded by the densely populated metropolitan Washington area, the center's location within the 7,500 acre Agricultural Research Center offers isolation from the mainstream. The entire Agricultural Research Center consists of predominantly hardwood forest with numerous openings and fields.

Major Land Resource Area:

Although the center lies within the Northern Coastal Plain Land Resource Area, it is very near the separation point between the Northern Coastal Plain LRA and the Northern Piedmont LRA.

Soils and Topography:

Soils on the center consist mainly of sandy loams and loamy sands with areas of split loam and clay. Complete soils descriptions and soils map follow. The land varies from gently sloping to moderately sloping. Conservation practices are necessary to prevent erosion. Wind erosion can be severe on the loamy soils unless adequate cover is provided.



## Facilities (contd.) Land Area:

The NPMC consists of 181 acres of SCS-owned land. Approximately eighty acres are considered tillable. The majority of the remaining land is in bottomland hardwood forest. Included in the acreage is a lake covering 17 surface acres. This lake was built about 1940 for irrigation purposes. Beck Branch, a small, year-round stream, feeds the lake and meanders through the center's bottomland forest.

Deer, small game and waterfowl are abundant on the center. Land not in cultivation is managed for wildlife according to a conservation plan. Deer and rabbits pose serious threats to observation rows (especially legumes). Groundhogs (woodchucks) cause occasional damage to fields due to their burrowing habit.

The wide variety of plants being increased on the center presents another problem--observing isolation requirements. To accomplish this, five fields are located from one-half to one mile from the headquarters-greenhouse complex.

### Structures:

Center buildings consist of main office (Building 509, located near the intersection of Soil Conservation and Beaver Dam Roads); two 75' x 16' glasshouses with attached headhouse and office space for the biological technician; enclosed garage with 30' x 24' shop area; enclosed garage for tractor and equipment storage; seed processing building; and plant storage building. Also, residences are provided on a rental basis for the manager and assistant manager. These residences are located on the center.

### Irrigation:

Supplemental irrigation is provided by a portable sprinkler system utilizing fire hydrants as the source of water.

## Climate

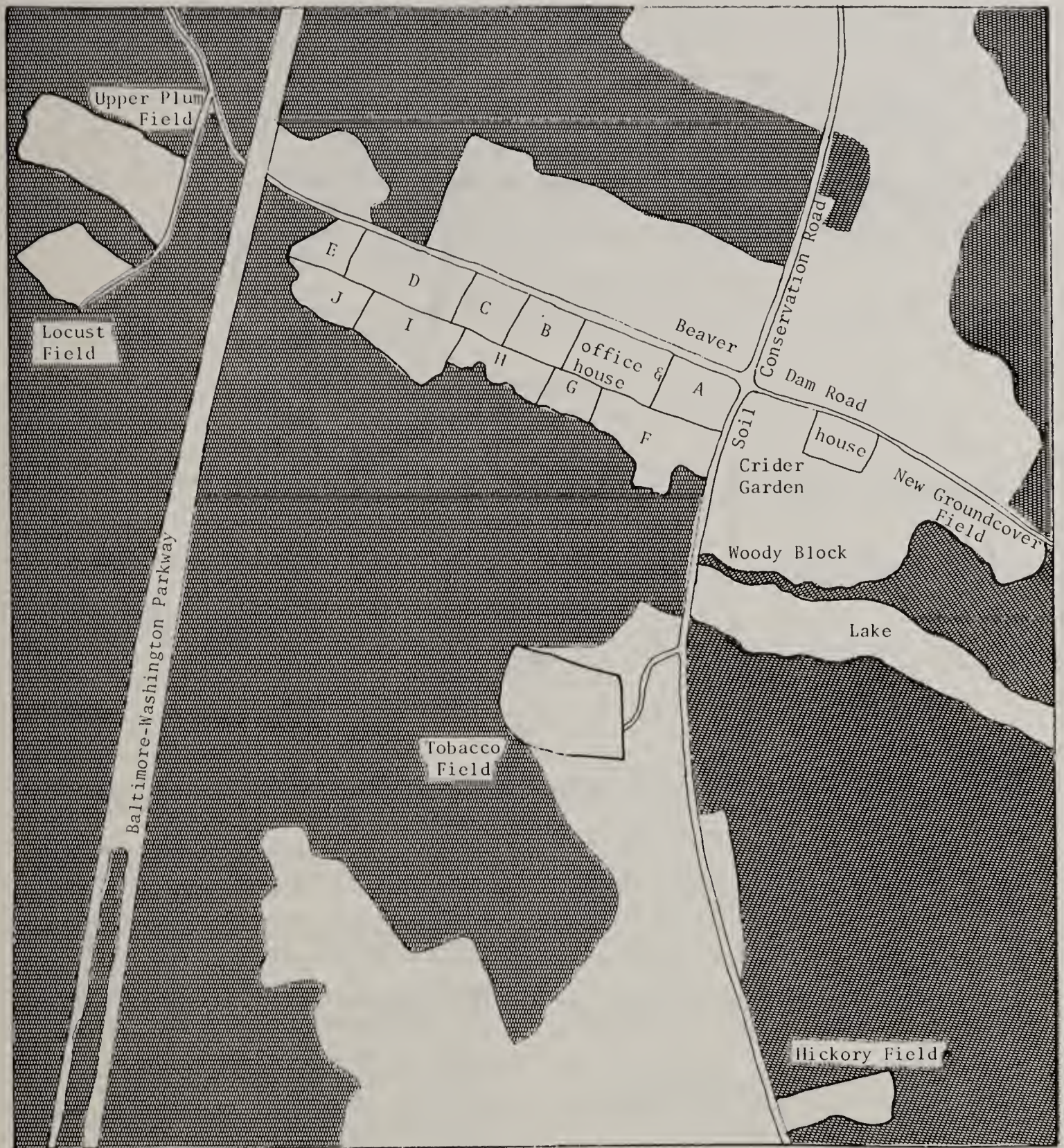
The NPMC is located in a humid, continental-type climate, primarily due to the typical west to east atmospheric flow and 43 inch average annual rainfall.

Summer weather is dominated by large masses of warm, moist air spreading northward from the south and southwest. The winter weather is rapidly changed from day to day by alternating high and low pressure systems in the west-east flow.

Temperatures of 90° F or higher occur 40 days per year on the average, and 32° F or lower occur on 119 days per year. The average annual precipitation is evenly distributed in a typical year. Summer rainfall of significance is generally from thunderstorms or the occasional tropical storm or hurricane that effects the weather.

The growing season averages 162 days with 50 percent probability that it will begin on April 29 and end on October 9 (see Appendix I).





Field Boundary Map

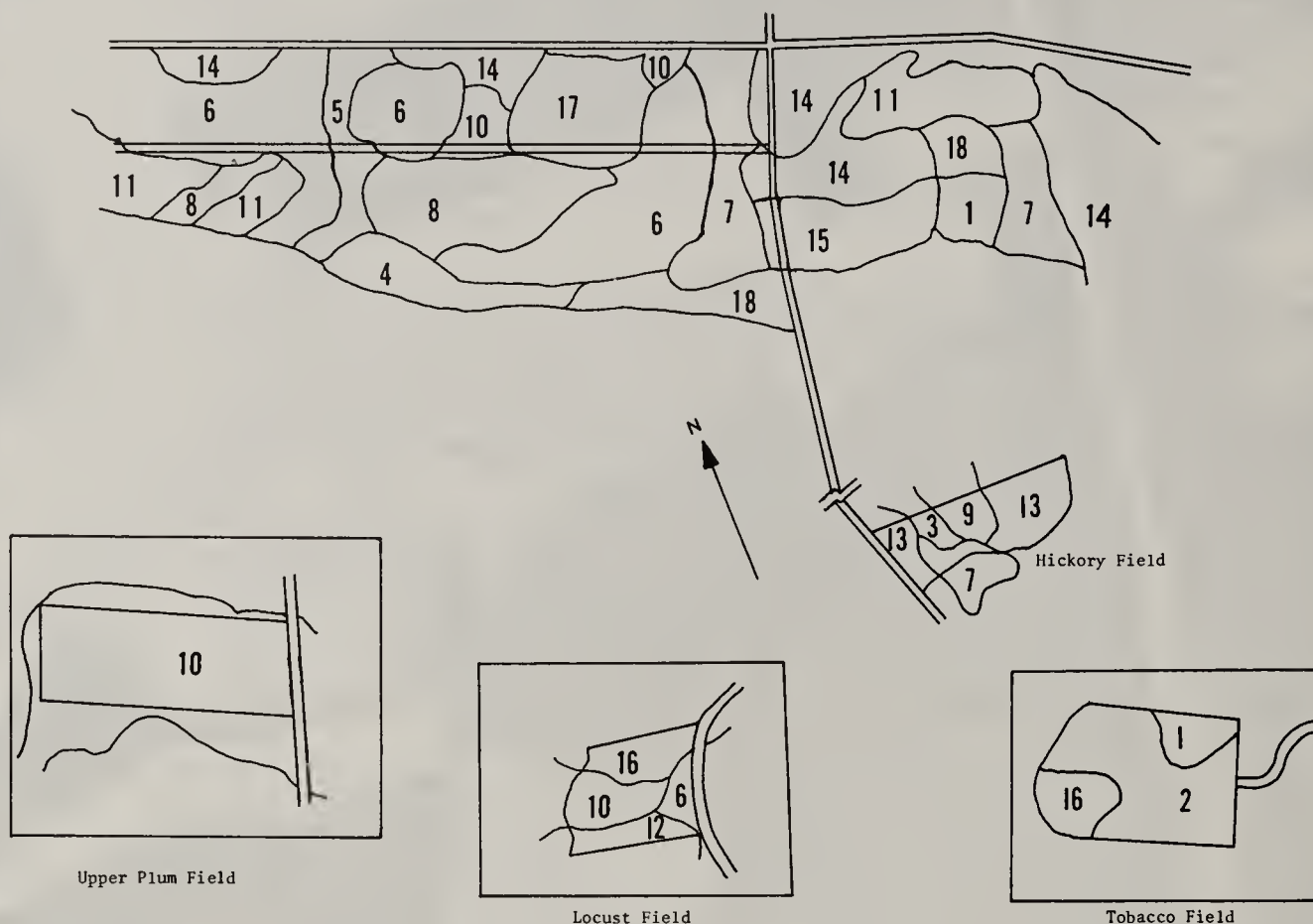
0 1/4 1/2 mile

Woods





# Soils Map and Descriptions



- 1 -- Cristiana clay--well drained soils, clayey throughout; most of the surface soil lost through erosion. Capability unit IVe-3. Moderate to strong acidity.
- 2 -- Cristiana fine sandy loam--a deep, well drained red clayey soil with a sandy surface and a very high moisture holding capacity.
- 3 -- Elkton silt loam--poorly drained silt loam over clay or silty clay. Drainage is a major problem. Capability unit IIIw-9. Strong to extreme acidity; the water table near the surface much of the year. Suitable for crops if desired.
- 4 -- Elsinboro sandy loam--sand dominant in the surface layer. Well suited to general crops and deep-rooted crops. Capability unit I-5. High moisture holding capacity.
- 5 -- Fallsington sandy loam--poorly drained loams and sandy loams. Capability unit IIIw-6. Strongly to extremely acid with moderate moisture holding capacity and moderate fertility. Suitable for farm uses if drained.
- 6 -- Galestown - Evesboro loamy sands--coarse, loose and droughty. Severely limited for farming; protection from wind erosion is necessary. Capability unit IVs-1. Low natural fertility and extreme acidity. Suitable for deep-rooted crops and for shallow-rooted plants if irrigation is supplied when needed.
- 7 -- Iuka sandy loam--moderately well drained, some drainage aids necessary for cropping. Capability unit IIw-7. Moderate to high moisture holding capability. Strongly to extremely acid. Suitable for general farm crops.
- 8 -- Keyport fine sandy loam--moderately well drained sandy, silty, and silty clay loams. Erosion rather than drainage is the prime consideration. Capability units IIe-36 and IIIe-36. Strongly acid, natural fertility medium to low. Well suited to some farm crops when managed.
- 9 -- Matapeake silt loam--well drained. Suitable for most crops including tobacco. Capability unit IIe-4. High moisture holding capacity and good natural fertility.
- 10 -- Muirkirk loamy sand--erosion hazard from the thick sandy surface layer. Capability units IIs-5 and IIe-5. Rapidly permeable, medium to strongly acid, moderate in fertility. Suited to deep-rooted crops only unless irrigated.
- 11 -- Rumford loam sand--medium and coarse sand moderate to dominant in the surface layer. Low in moisture and plant nutrients, but high quality crops can be produced if managed properly. Capability units IIs-4 and IIIe-33. Excessively drained, acid.
- 12 -- Rumford sandy and clayey land--suitable for undemanding farm crops on rotation with long-term pasture or woodland. Dominant sand in the surface layer. Capability units IIe-4I and IVe-5. Medium to extreme acidity, fertility low to high.
- 13 -- Sassafras sandy loam--moisture holding capacity is good except for prolonged drought. Erosion is likely unless good farm practices are followed, suited to most crops. Capability unit IIe-5. Acid, productive under fertilization. Suitable for most crops.
- 14 -- Sunnyside fine sandy loam--moderate risk of erosion, droughty only during long dry periods. Suited to most crops. Capability units IIe-5 and IIIe-5. Acid, require fertilizer for good crops.
- 15 -- Sunnyside sandy clay loam--severely eroded if unprotected. Suitable for hay or pasturage only, or woodland. Capability unit VIe-2. Well drained, strong to extreme acidity.
- 16 -- Sunnyside loam--moderately eroded. Suited to general crops and medium quality tobacco. Capability unit IIIe-4. Deep, well drained, medium to strong acidity. Moderate to high natural fertility.
- 17 -- Sunnyside urban land--disturbed land with no capability unit assigned. Variable potential and productivity.
- 18 -- Woodstown sandy loam--moderately well drained. Both erosion control and improved drainage are needed due to seasonally high water table. Capability units IIe-36 and IIIe-36. Moderately coarse textured and strongly acid. Natural fertility is medium to low. Suitable for some crops except where limited by slope.



## Administration

The center is administered by the U. S. Department of Agriculture, Soil Conservation Service. Direction for the operation of the center is provided by an advisory committee appointed by the SCS Chief. It consists of the director of the Ecological Sciences Division, who serves as chairman; one state conservationist; one technical service center plant materials specialist; and the director of the Beltsville Agricultural Research Center. The committee meets at least once a year with the NPMC manager and the national plant materials specialist to provide guidance to the center.

The National Plant Materials Center 1981 Advisory Committee is as follows:

Thomas N. Shiflet  
Director, Ecological Sciences Division

Gerald R. Calhoun  
State Conservationist, Maryland State Office

Paul A. Putnam  
Director, Beltsville Agricultural Research Center

W. Curtis Sharp  
Plant Materials Specialist, Northeast National  
Technical Center

Advisors to NPMC:

Robert S. MacLauchlan  
National Plant Materials Specialist, Ecological  
Sciences Division

H. Wayne  
Staff Plant Materials Specialist, Ecological  
Sciences Division.

## Staff

Stephen K. Salvo	Manager
William H. Fry	Assistant Manager
Robert J. Glennon	Soil Conservationist
Carol A. Tissue	Secretary (January - May)
Sheila A. Collins	Secretary (September - December)
Richard C. Russell	Biological Technician (January - March)
Robert L. Hoover	Biological Technician (June - December)
Robert A. Hood	Tractor Operator
Daniel A. Palensky	Gardener

<u>Staff (contd.)</u>	Tina McKay	Secretary (Summer)
	Shawn D. Conrad	Biological Aide (Summer)
	Kevin Dugard	Biological Aide (Summer)
<u>Employee Development</u>	Secretarial Development - Carol Tissue	
	Management Seminar for Men and Women - Keith Salvo	
	ADP Training - Keith Salvo William Fry	
	Management Level II - Keith Salvo Danny Palensky	
	Field PMC Training - Keith Salvo	
<u>Employee Recognition</u>	Quality Within Grade Award - Keith Salvo	
	10-Year Service Award - Carol Tissue	
<u>Functions</u>	<p>--Requests, receives, assembles and, as needed, increases seed and vegetative materials to meet requests of various field PMCs according to priorities established in the long-range program of each PMC.</p> <p>--Works closely with the Plant Introduction Office, Germplasm Resources Laboratory, ARS, at Beltsville, Maryland, to obtain plant materials needed to fill requests of field PMCs.</p> <p>--Serves as coordinator for the acquisition of all accessions from regional plant introduction stations for use by PMCs.</p> <p>--Works closely with the Plant Introduction Office, Plant Germplasm Resources Laboratory, ARS, to ensure compliance with quarantine restrictions governing the flow of plant materials into and out of the United States.</p> <p>--Prepares background information about new plants and other plant materials assembled for distribution.</p> <p>--Assembles and distributes seed and plants to meet foreign requests.</p> <p>--Acts as the coordinating office for plant accessioning and plant performance summaries for the plant materials automatic data processing (ADP) storage and retrieval system.</p> <p>--Conducts special projects to help solve problems common to all of several PMCs, such as storage of seed and plants and development of storage techniques.</p> <p>--Maintains contacts for authoritative identification of plant specimens submitted by SCS personnel.</p>	

## Functions (contd.)

--Provides for the increase of plant materials for final testing if a PMC is unable to produce adequate amounts.

--Provides project assistance to other PMCs when necessary to attain SCS goals.

## Operations

### Summary of Activities

In supporting the field plant materials centers during 1981, the National Plant Materials Center was responsible for introducing into the plant materials program over 730 accessions from 21 foreign countries (see Appendix II). Such countries as Australia, Brazil, Canada, Czechoslovakia, Denmark, England, France, Germany, Poland, Russia, Spain, Tunisia and many others supplied plant material. The center also obtained 319 accessions through the Regional Plant Introduction Stations (see Appendix III).

In most instances, the quantity of seed received by the center was inadequate to meet field PMC requirements. Consequently, the seed was increased at the NPMC prior to shipment. In 1981, the center planted 115 accessions for increase (see Appendix IV), increased the seed quantity of 254 accessions requested by the field PMCs (see Appendix V), shipped over 3,300 packets of seed to 20 of the 22 field centers (see Appendix VI), and shipped 373 accessions to 11 domestic organizations for research (see Appendix VII). The NPMC also grew and shipped nearly 30,000 live plants to other centers and agencies in support of SCS activities in the Mid-Atlantic States (see Appendix VIII).

The NPMC responded to requests from abroad by shipping 280 accessions to 42 cooperators in 26 countries (see Appendix IX).

The NPMC provided special project assistance to the Cape May Plant Materials Center in New Jersey (Vegetative Erosion Control Project) and the Quicksand Plant Materials Center in Kentucky (Orchardgrass Drought Tolerance Project). In both instances, the NPMC provided men and materiel to the centers in order for each to accomplish its assigned tasks in the most economical manner. See Appendices X and XI for details on these special projects.

Special assistance was also provided to the field centers and cooperators in the form of literature searches (see Appendix XII), plant identification (see Appendix XIII), and seed germination testing (see Appendices XIV and XV).

### Germination Test Results on NPMC Seed Inventory

In 1981, seed of 624 accessions was tested for germination. The seed tested was from the 1979, 1980 and 1981 harvests; and from the forb and woody plant inventory that required temperatures of 20° C (nighttime) and 30° C (Daytime). In addition to species included in the Association of Official Seed Analysts 'Rules for Testing Seeds' and the Forest Service 'Seeds of Woody Plants in the United States,' genera and species are listed for which test criteria are not established. Those cases are designated by one asterisk ( \* ) for genera that have other species with established



## Operations (contd.)

rules, and two asterisks ( \*\* ) for genera that have no species with established rules. Species with established rules provide a basis for trials of species without rules. Species of genera without rules require more trials to achieve satisfactory germination. Poor response of these species may represent one in a series of trials to establish test criteria.

### Evaluation of Potential Drought Tolerant Orchardgrass (Dactylis glomerata) Ecotypes

At the request of the Kentucky Plant Materials Center, a project was established in 1980 to evaluate drought tolerant orchardgrass accessions on a shallow shale area in West Virginia. The assembly was made by the Kentucky Center and consisted of 25 accessions collected in various counties of Virginia, West Virginia and Maryland. These were planted to compare with the following standards:

'Jackson'	'Palestine'
'Potomac'	'Berber'
'Pennlate'	Common
'VA-70'	

In addition, 'Kentucky 31' tall fescue (*Festuca arundinacea*) was also included as a standard for comparison.

Three replications of the collection were established on the Robert Snyder farm about 7 miles north of Petersburg, West Virginia. All accessions were successfully established in all replications except T-7231 and 'Palestine', which had very poor stands. 'Berber' did not survive the winter of 1980-81.

During 1981, the plots were harvested 4 times to simulate pasture harvesting. The forage harvested was air dried and weighed. The data collected in 1980 and 1981 are listed in Appendix XI. Plots will be evaluated again in 1982.

The results of the preliminary evaluation of the data would indicate that there are no outstanding accessions in this collection. Since the plots were established, the driest weather conditions occurred between November 1980 and May 1981. During this period, several accessions and cultivars did well; they were, however, outyielded by 'Kentucky 31' tall fescue in the spring of 1981. During the summer of 1981, there was moderate rainfall. The best accessions and cultivars of orchardgrass appeared to do slightly better than the fescue during this period when moisture availability was not critical but temperatures were high. No accessions appeared to be any better than the best cultivars at any time during the year. Following the 1982 evaluation year, the results will be more closely examined and final results summarized in the 1982 Annual Technical Report.

### Plant Performance

Appendix XVI lists the accessions grown for seed production on the NPMC during 1980 and 1981. These plants were evaluated for

Operations (contd.) a limited number of characteristics throughout the year. The data from these evaluations are shown as NPMDS-8 and NPMDS-13.

Some of the plants evaluated are undoubtedly better adapted to areas other than Beltsville. This should be considered when selecting plants for further evaluation. However, some accessions that looked exceptionally good here at the center are:

Coronilla varia T-12674

This plant looks very good here at Beltsville. It appears to be more heat tolerant than other accessions grown and is a heavy seed producer.

Elymus arenarius PI-345978

This plant is noted for its attractive blue color.

Lathyrus palustris T-10525

This plant made outstanding vegetative growth but does not flower here.

Lotus corniculatus

This plant grows flat along the ground with stems rooting readily. It covers a large area in a short time.

Medicago polymorpha T-18466

A very uniform, good-looking plant. Probably later maturing than most accessions, but a heavy seed producer.



APPENDIX I  
WEATHER DATA (1981)





## Weather Data - 1981

### Temperature Extremes

<u>Month</u>	<u>Lowest Temperature Recorded for Month (°F)</u>	<u>Highest Temperature Recorded for Month (°F)</u>
January	-11	58
February	6	74
March	17	80
April	25	86
May	36	91
June*	49	97
July	55	97
August	49	95
September	38	94
October	27	86
November	17	78
December	2	68

### Means

<u>Month</u>	<u>Mean Low For Month</u>	<u>Mean High For Month</u>	<u>Deviation from Average</u>	
			<u>Low</u>	<u>High</u>
January*	19	39	-4	+8
February*	27	52	+3	+6
March*	30	54	+0	+3
April*	45	71	+15	+5
May*	50	78	+0	+4
June*	63	86	+5	+4
July*	67	88	+3	+1
August*	63	86	-2	+1
September	57	78	+2	-1
October	41	66	-2	-2
November	33	59	+1	+3
December	25	43	+1	-2

\*Temperature data for January through August supplemented from U. S. Weather Bureau, Climatological Data, Glenn Dale Station.

Normal date of last spring freeze - April 29

Actual date of last spring freeze in 1981 - April 16

Normal date of first fall freeze - October 9

Actual date of first fall freeze - October 13

Normal number of freeze-free days - 162

Actual number of freeze-free days in 1981 - 179

Weather Data - 1981 (contd.)

<u>Precipitation*</u>			
<u>Month</u>	<u>Precipitation For Month (Inches)</u>	<u>Deviation From Monthly Average</u>	<u>Cumulative Deviation</u>
January	0.52	-2.30	-2.30
February	3.71	+1.09	-1.21
March	1.52	-2.20	-3.41
April	2.51	+0.32	-3.09
May	4.74	+0.77	-2.32
June	2.39	-1.70	-4.02
July	4.26	-0.34	-4.36
August	4.92	+0.06	-4.30
September	3.57	+0.25	-4.05
October	3.27	+0.23	-3.82
November	0.43	-2.77	-6.59
December	3.25	0.00	-6.59

\*Precipitation data for January through August supplemented from U. S. Weather Bureau, Climatological Data, Beltsville Station.

Total precipitation recorded in 1981: 36.09 inches

Deviation from average annual precipitation: -6.59 inches

Weather Summary

The year 1981 was both warmer and drier than average at the National Plant Materials Center for the second consecutive year. However, once again precipitation was normal for the period April through October. Total precipitation was 36.09 inches, 6.59 inches below normal.

The last spring freeze occurred thirteen days earlier than normal and the first fall freeze four days later than normal. The growing season lasted 179 days, seventeen days longer than normal.

APPENDIX II  
PLANT MATERIALS RECEIVED (INTRODUCTIONS)



## Plant Materials Received - Introductions

The National Plant Materials Center maintains a standing request with the Germplasm Resources Laboratory of the Science and Education Administration for foreign plant materials needed to fill requests of field plant materials centers. The NPMC also requests material from numerous foreign researchers. During 1981 the NPMC received approximately 730 accessions of plant materials from 21 foreign countries.

Frequently the material received at the NPMC is in such small amounts that it must be increased before distribution to the field PMCs.

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Abies alba</u>	Pinaceae	1	<u>Acacia longifolia</u>	Fabaceae	3
<u>Abies balsamea</u>	"	2	<u>Acacia maidenii</u>	"	1
<u>Acacia accola</u>	Fabaceae	1	<u>Acacia mearnsii</u>	"	1
<u>Acacia acinacea</u>	"	1	<u>Acacia melanoxylon</u>	"	4
<u>Acacia alata</u>	"	1	<u>Acacia merralli</u>	"	2
<u>Acacia brachybotrya</u>	"	1	<u>Acacia microcarpa</u>	"	1
<u>Acacia catechu</u>	"	1	<u>Acacia mucronata</u>	"	1
<u>Acacia cognata</u>	"	1	<u>Acacia neriifolia</u>	"	1
<u>Acacia conspersa</u>	"	1	<u>Acacia oxycedrus</u>	"	1
<u>Acacia cyanophylla</u>	"	1	<u>Acacia parvipinnula</u>	"	1
<u>Acacia cyclops</u>	"	2	<u>Acacia paucijuga</u>	"	1
<u>Acacia dealbata</u>	"	3	<u>Acacia penninervis</u>	"	1
<u>Acacia deanei</u>	"	1	<u>Acacia prominens</u>	"	1
<u>Acacia decora</u>	"	1	<u>Acacia pulchella</u>	"	1
<u>Acacia difformis</u>	"	1	<u>Acacia pycnantha</u>	"	2
<u>Acacia eburnea</u>	"	1	<u>Acacia quornensis</u>	"	1
<u>Acacia floribunda</u>	"	1	<u>Acacia retinodes</u>	"	5
<u>Acacia gracilifolia</u>	"	1	<u>Acacia rigens</u>	"	1
<u>Acacia hakeoides</u>	"	1	<u>Acacia rivalis</u>	"	1
<u>Acacia horida</u>	"	1	<u>Acacia rossei</u>	"	1
<u>Acacia howittii</u>	"	1	<u>Acacia rupicola</u>	"	1
<u>Acacia imbricata</u>	"	1	<u>Acacia saligna</u>	"	11
<u>Acacia implexa</u>	"	1	<u>Acacia stenophylla</u>	"	1
<u>Acacia iteophylla</u>	"	1	<u>Acacia suaveolens</u>	"	1
<u>Acacia juniperina</u>	"	1	<u>Acacia subulata</u>	"	1
<u>Acacia karoo</u>	"	2	<u>Acacia verticillata</u>	"	1
<u>Acacia lasiocalyx</u>	"	1	<u>Acacia viscidula</u>	"	1
<u>Acacia leiphylla</u>	"	1	<u>Acacia wattiana</u>	"	2
<u>Acacia linifolia</u>	"	1	<u>Acacia species</u>	"	1

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Acer ginnala</u>	Aceraceae	1	<u>Alnus incana</u>	Betulaceae	9
<u>Acer negundo</u>	"	1	<u>Alnus pendula</u>	"	1
<u>Acer platanoides</u>	"	1	<u>Amelanchier alnifolia</u>	Rosaceae	7
<u>Acer pseudo-platanus</u>	"	2	<u>Amelanchier florida</u>	"	2
<u>Acer tataricum</u>	"	1	<u>Amelanchier laevis</u>	"	1
<u>Achillea ageratum</u>	Asteraceae	2	<u>Amorpha californica</u>	Fabaceae	2
<u>Achillea alpina</u>	"	1	<u>Amorpha croceo-lanata</u>	"	2
<u>Aster asplenifolia</u>	"	1	<u>Amorpha fruticosa</u>	"	3
<u>Aster clavenae</u>	"	1	<u>Amygdalus nana</u>	Rosaceae	1
<u>Aster collina</u>	"	1	<u>Antennaria alpina</u>	Asteraceae	3
<u>Aster distans</u>	"	2	<u>Antennaria dioica</u>	"	2
<u>Acer filipendulina</u>	"	1	<u>Antennaria howellii</u>	"	1
<u>Acer millefolium</u>	"	9	<u>Antennaria margaritacea</u>	"	1
<u>Acer ptarmica</u>	"	3	<u>Antennaria parvifolia</u>	"	1
<u>Acer taygetea</u>	"	1	<u>Antennaria pulcherrima</u>	"	1
<u>Acer tomentosa</u>	"	1	<u>Antennaria umbrinella</u>	"	1
<u>Agropyron agroelymoides</u>	Poaceae	1	<u>Armeria maritima</u>	Plumbaginaceae	6
<u>Agropyron caninum</u>	"	1	<u>Armeria pseudoarmeria</u>	"	1
<u>Agropyron cristatum</u>	"	2	<u>Armeria pubigera</u>	"	1
<u>Agropyron desertorum</u>	"	1	<u>Armeria pungens</u>	"	2
<u>Agropyron elmeri</u>	"	1	<u>Artemisia arctica</u>	Asteraceae	1
<u>Agropyron elongatiforme</u>	"	1	<u>Artemisia campestris</u>	"	1
<u>Agropyron imbricatum</u>	"	1	<u>Artemisia ludoviciana</u>	"	1
<u>Agropyron littoralis</u>	"	1	<u>Artemisia vulgaris</u>	"	16
<u>Agropyron magellanicum</u>	"	1	<u>Aster alpinus</u>	Asteraceae	16
<u>Agropyron scribnyi</u>	"	1	<u>Aster amelloides</u>	"	1
<u>Agropyron sibiricum</u>	"	1	<u>Aster amellus</u>	"	3
<u>Agropyron smithii</u>	"	1	<u>Aster brachyactis</u>	"	1
<u>Agrostis alba</u>	Poaceae	2	<u>Aster chilensis</u>	"	1
<u>Agrostis gigantea</u>	"	3	<u>Aster conspicuus</u>	"	1
<u>Agrostis stolonifera</u>	"	4	<u>Aster cordifolius</u>	"	1
<u>Agrostis tenuis</u>	"	5	<u>Aster diplostephoides</u>	"	1
<u>Albizia lephantha</u>	Fabaceae	2	<u>Aster dumosus</u>	"	2
<u>Alnus crispa</u>	Betulaceae	1	<u>Aster ericoides</u>	"	1



<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Aster garibaldii</u>	Asteraceae	1	<u>Balsamorhiza sagittata</u>	Asteraceae	1
<u>Aster hybridus</u>	"	2	<u>Baptisia australis</u>	Fabaceae	2
<u>Aster ibericus</u>	"	1	<u>Betula papyrifera</u>	Betulaceae	1
<u>Aster linosyris</u>	"	3	<u>Betula pendula</u>	"	1
<u>Aster maackii</u>	"	1	<u>Biota orientalis</u>	Cupressaceae	3
<u>Aster novae-angliae</u>	"	2	<u>Biserrula pelecinus</u>	Fabaceae	1
<u>Aster novi-belgii</u>	"	2	<u>Bouteloua gracilis</u>	Poaceae	1
<u>Aster pansus</u>	"	1	<u>Bromus biebersteinii</u>	Poaceae	1
<u>Aster punctatus</u>	"	1	<u>Bromus carinatus</u>	"	1
<u>Aster pyrenaeus</u>	"	2	<u>Bromus erectus</u>	"	1
<u>Aster scaber</u>	"	1	<u>Bromus inermis</u>	"	9
<u>Aster sibiricus</u>	"	4	<u>Buckloe dactyloides</u>	Poaceae	1
<u>Aster squamatus</u>	"	1	<u>Calamagrostis arundinacea</u>	Poaceae	2
<u>Aster tataricus</u>	"	1	<u>Calamagrostis lapponica</u>	"	1
<u>Aster tibeticus</u>	"	1	<u>Calamagrostis purpurea</u>	"	1
<u>Aster tradescantii</u>	"	1	<u>Calendula officinalis</u>	Asteraceae	1
<u>Aster tripolium</u>	"	5	<u>Callistemon acuminatus</u>	Myrtaceae	1
<u>Aster umbellatus</u>	"	1	<u>Callistemon citrinus</u>	"	1
<u>Astragalus adsurgens</u>	Fabaceae	1	<u>Callistemon combdinensis</u>	"	1
<u>Astragalus alopecuroides</u>	"	1	<u>Callistemon lilacinus</u>	"	1
<u>Astragalus alpinus</u>	"	1	<u>Callistemon linearis</u>	"	2
<u>Astragalus arenarius</u>	"	1	<u>Callistemon macropunctatus</u>	"	1
<u>Astragalus cicer</u>	"	6	<u>Callistemon pallidus</u>	"	1
<u>Astragalus dasyanthus</u>	"	1	<u>Callistemon rigidus</u>	"	1
<u>Astragalus falcatus</u>	"	3	<u>Callistemon salignus</u>	"	1
<u>Astragalus galegiformis</u>	"	1	<u>Callistemon speciosus</u>	"	1
<u>Astragalus glycyphyllos</u>	"	10	<u>Calothamnus validus</u>	Myrtaceae	1
<u>Astragalus hamosus</u>	"	1	<u>Caragana arborescens</u>	Fabaceae	3
<u>Astragalus macrophyllus</u>	"	1	<u>Caragana boisii</u>	"	1
<u>Astragalus narbonensis</u>	"	1	<u>Caragana frutex</u>	"	1
<u>Astragalus onobrychis</u>	"	1	<u>Carex bigelowii</u>	Cyperaceae	2
<u>Astragalus ponticus</u>	"	1	<u>Carex lachenalii</u>	"	3
<u>Astragalus roemeri</u>	"	1	<u>Carex saxatilis</u>	"	3
<u>Atriplex hortensis</u>	Chenopodiaceae	1	<u>Cassia artemisioides</u>	Fabaceae	1

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Cassia floribunda</u>	Fabaceae	1	<u>Coix lacrima-jobi</u>	Poaceae	4
<u>Cassia odorata</u>	"	1	<u>Conyza canadensis</u>	Asteraceae	5
<u>Cassia senna</u>	"	1	<u>Cornus sanguinea</u>	Cornaceae	4
<u>Cassia splendida</u>	"	1	<u>Cornus sericea</u>	"	1
<u>Cassia stipulacea</u>	"	1	<u>Coronilla emeroides</u>	Fabaceae	1
<u>Casuarina</u> <u>cunninghamiana</u>	Casuarinaceae	2	<u>Coronilla juncea</u>	"	1
<u>Casuarina littoralis</u>	"	1	<u>Coronilla scorpioides</u>	"	1
<u>Casuarina pusilla</u>	"	1	<u>Coronilla valentina</u>	"	2
<u>Casuarina stricta</u>	"	1	<u>Coronilla varia</u>	"	2
<u>Casuarina torulosa</u>	"	1	<u>Cotoneaster bacillaris</u>	Rosaceae	1
<u>Ceanothus americanus</u>	Rhamnaceae	3	<u>Cotoneaster bullatus</u>	"	1
<u>Ceanothus arboreus</u>	"	1	<u>Cotoneaster buxifolius</u>	"	1
<u>Ceanothus delilianus</u>	"	1	<u>Cotoneaster densiflorus</u>	"	1
<u>Ceanothus griseus</u>	"	1	<u>Cotoneaster distichus</u>	"	2
<u>Ceanothus pallidus</u>	"	1	<u>Cotoneaster divaricatus</u>	"	1
<u>Ceanothus spinosus</u>	"	1	<u>Cotoneaster elegans</u>	"	1
<u>Ceanothus topaz</u>	"	1	<u>Cotoneaster foveolatus</u>	"	1
<u>Ceanothus velutinus</u>	"	1	<u>Cotoneaster horizontalis</u>	"	2
<u>Ceanothus species</u>	"	3	<u>Cotoneaster ignava</u>	"	1
<u>Celtis australis</u>	Ulmaceae	3	<u>Cotoneaster lacteus</u>	"	1
<u>Celtis caucasica</u>	"	1	<u>Cotoneaster lucidus</u>	"	1
<u>Celtis occidentalis</u>	"	8	<u>Cotoneaster melanocarpus</u>	"	2
<u>Celtis pumila</u>	"	1	<u>Cotoneaster microphyllus</u>	"	4
<u>Celtis sinensis</u>	"	1	<u>Cotoneaster multiflorus</u>	"	1
<u>Cephalanthus</u> <u>occidentalis</u>	Rubiaceae	2	<u>Cotoneaster nanshan</u>	"	1
<u>Cercis siliquastrum</u>	Fabaceae	4	<u>Cotoneaster nummularia</u>	"	1
<u>Cercocarpus ledifolius</u>	Rosaceae	1	<u>Cotoneaster obscurus</u>	"	1
<u>Chaenomeles japonica</u>	Rosaceae	1	<u>Cotoneaster praecox</u>	"	1
<u>Chamaenerion</u> <u>angustifolium</u>	Onagraceae	3	<u>Cotoneaster racemiflorus</u>	"	5
<u>Chasmanthium latifolium</u>	Poaceae	4	<u>Cotoneaster rotundifolius</u>	"	2
<u>Chrysanthemum</u> <u>leucanthemus</u>	Asteraceae	1	<u>Cotoneaster salicifolius</u>	"	4
<u>Clianthus puniceus</u>	Fabaceae	1	<u>Cotoneaster serotinus</u>	"	1
			<u>Cotoneaster simmonsii</u>	"	2
			<u>Cotoneaster splendens</u>	"	2



<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Cotoneaster wardii</u>	Rosaceae	1	<u>Erigeron acer</u>	Asteraceae	3
<u>Cotoneaster watereri</u>	"	1	<u>Erigeron acris</u>	"	1
<u>Cotoneaster zabelii</u>	"	1	<u>Erigeron alpinus</u>	"	3
<u>Crataegus chlorosarca</u>	Rosaceae	2	<u>Erigeron annuus</u>	"	3
<u>Crataegus douglasii</u>	"	1	<u>Erigeron atticus</u>	"	1
<u>Crataegus macrosperma</u>	"	1	<u>Erigeron borealis</u>	"	1
<u>Crataegus sanguinea</u>	"	1	<u>Erigeron compositus</u>	"	2
<u>Cynodon dactylon</u>	Poaceae	2	<u>Erigeron condensatus</u>	"	1
<u>Dactylis glomerata</u>	Poaceae	27	<u>Erigeron coulteri</u>	"	1
<u>Danthonia spicata</u>	Poaceae	1	<u>Erigeron divergens</u>	"	1
<u>Daphne mezereum</u>	Thymelaeaceae	9	<u>Erigeron flagellaris</u>	"	1
<u>Delphinium consolida</u>	Ranunculaceae	1	<u>Erigeron glabellus</u>	"	1
<u>Deschampsia cespitosa</u>	Poaceae	15	<u>Erigeron glabratus</u>	"	1
<u>Digitalis purpurea</u>	Scrophulariaceae	2	<u>Erigeron glaucus</u>	"	2
<u>Dolichos lablab</u>	Fabaceae	2	<u>Erigeron humilis</u>	"	1
<u>Dolichos lignosus</u>	"		<u>Erigeron kamtschaticus</u>	"	1
<u>Dolichos zebra</u>	"	2	<u>Erigeron karvinskianus</u>	"	1
<u>Dryas drummondii</u>	Rosaceae	3	<u>Erigeron macranthus</u>	"	1
<u>Dryas octopetala</u>	"	10	<u>Erigeron mucronatus</u>	"	1
<u>Echinacea pallida</u>	Asteraceae	1	<u>Erigeron naudinii</u>	"	1
<u>Elaeagnus angustifolia</u>	Elaeagnaceae	3	<u>Erigeron speciosus</u>	"	4
<u>Elymus arenarius</u>	Poaceae	2	<u>Erigeron uniflorus</u>	"	1
<u>Elymus canadensis</u>	"	1	<u>Eriophorum angustifolium</u>	Cyperaceae	5
<u>Elymus caninus</u>	"	1	<u>Erythrina crista-galli</u>	Fabaceae	1
<u>Elymus caput-medusae</u>	"	1	<u>Escholtzia californica</u>	Papaveraceae	1
<u>Elymus farctus</u>	"	1	<u>Eucalyptus accedens</u>	Myrtaceae	1
<u>Elymus patagonicus</u>	"	1	<u>Eucalyptus albida</u>	"	1
<u>Elymus repens</u>	"	1	<u>Eucalyptus angulosa</u>	"	1
<u>Elymus sibiricus</u>	"	1	<u>Eucalyptus annulata</u>	"	1
<u>Enkianthus campanulatus</u>	Ericaceae	1	<u>Eucalyptus antipolitensis</u>	"	1
<u>Ephedra fragilis</u>	Ephedraceae	1	<u>Eucalyptus astringens</u>	"	1
<u>Epilobium angustifolium</u>	Onagraceae	6	<u>Eucalyptus badjensis</u>	"	1
<u>Epilobium angustissimum</u>	"	1	<u>Eucalyptus benthami</u>	"	1
<u>Epilobium latifolium</u>	"	1	<u>Eucalyptus blakelyi</u>	"	1

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Eucalyptus bosistoana</u>	Myrtaceae	1	<u>Eucalyptus falcata</u>	Myrtaceae	1
<u>Eucalyptus botryoides</u>	"	3	<u>Eucalyptus fastigata</u>	"	1
<u>Eucalyptus brachycalyx</u>	"	1	<u>Eucalyptus fibrosa</u>	"	1
<u>Eucalyptus brachycorys</u>	"	1	<u>Eucalyptus ficifolia</u>	"	1
<u>Eucalyptus brockwayi</u>	"	1	<u>Eucalyptus gittinsii</u>	"	1
<u>Eucalyptus buprestium</u>	"	1	<u>Eucalyptus globulus</u>	"	3
<u>Eucalyptus burracoppinensis</u>	"	1	<u>Eucalyptus goniantha</u>	"	1
<u>Eucalyptus calophylla</u>	"	1	<u>Eucalyptus goniocalyx</u>	"	2
<u>Eucalyptus camaldulensis</u>	"	3	<u>Eucalyptus gracilis</u>	"	2
<u>Eucalyptus campaspe</u>	"	1	<u>Eucalyptus grandis</u>	"	1
<u>Eucalyptus camphora</u>	"	1	<u>Eucalyptus gunnii</u>	"	1
<u>Eucalyptus citriodora</u>	"	1	<u>Eucalyptus huberiana</u>	"	1
<u>Eucalyptus clelandii</u>	"	1	<u>Eucalyptus incrassata</u>	"	2
<u>Eucalyptus cloeziana</u>	"	1	<u>Eucalyptus kartzoffiana</u>	"	1
<u>Eucalyptus concinna</u>	"	1	<u>Eucalyptus largiflorens</u>	"	2
<u>Eucalyptus conglobata</u>	"	1	<u>Eucalyptus ligulata</u>	"	1
<u>Eucalyptus cornuta</u>	"	1	<u>Eucalyptus linearis</u>	"	1
<u>Eucalyptus crucis</u>	"	1	<u>Eucalyptus macranda</u>	"	1
<u>Eucalyptus cylindriflora</u>	"	1	<u>Eucalyptus macrorhyncha</u>	"	1
<u>Eucalyptus cylindrocarpa</u>	"	1	<u>Eucalyptus maculata</u>	"	1
<u>Eucalyptus dalrympleana</u>	"	1	<u>Eucalyptus maidenii</u>	"	1
<u>Eucalyptus decipiens</u>	"	1	<u>Eucalyptus mannifera</u>	"	2
<u>Eucalyptus diptera</u>	"	1	<u>Eucalyptus marginata</u>	"	1
<u>Eucalyptus diversicolor</u>	"	1	<u>Eucalyptus megacarpa</u>	"	1
<u>Eucalyptus diversifolia</u>	"	1	<u>Eucalyptus melliodora</u>	"	1
<u>Eucalyptus doratozylon</u>	"	1	<u>Eucalyptus merrickiae</u>	"	1
<u>Eucalyptus drummondii</u>	"	1	<u>Eucalyptus morrisii</u>	"	1
<u>Eucalyptus dumosa</u>	"	2	<u>Eucalyptus nutans</u>	"	1
<u>Eucalyptus dundasii</u>	"	1	<u>Eucalyptus oblique</u>	"	1
<u>Eucalyptus dwyeri</u>	"	1	<u>Eucalyptus obtusiflora</u>	"	1
<u>Eucalyptus ebbanoensis</u>	"	1	<u>Eucalyptus oldfieldii</u>	"	1
<u>Eucalyptus eremicola</u>	"	1	<u>Eucalyptus oleosa</u>	"	1
<u>Eucalyptus erythronema</u>	"	2	<u>Eucalyptus oraria</u>	"	1
<u>Eucalyptus exilis</u>	"	1	<u>Eucalyptus oreades</u>	"	1

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Eucalyptus oxymitra</u>	Myrtaceae	1	<u>Euonymus alata</u>	Celastraceae	1
<u>Eucalyptus paniculata</u>	"	1	<u>Eurya japonica</u>	Theaceae	1
<u>Eucalyptus parvifolia</u>	"	1	<u>Frangula alnus</u>	Rhamnaceae	4
<u>Eucalyptus patens</u>	"	1	<u>Genista monsperma</u>	Fabaceae	1
<u>Eucalyptus pauciflora</u>	"	4	<u>Gilia rubra</u>	Polemoniaceae	1
<u>Eucalyptus phoenicea</u>	"	1	<u>Gleditsia triacanthos</u>	Fabaceae	6
<u>Eucalyptus pileata</u>	"	2	<u>Grevillea biternata</u>	Proteaceae	1
<u>Eucalyptus platypus</u>	"	2	<u>Grevillea hilliana</u>	"	1
<u>Eucalyptus plenissima</u>	"	1	<u>Grevillea robusta</u>	"	1
<u>Eucalyptus polycarpa</u>	"	1	<u>Grewia occidentalis</u>	Tiliaceae	1
<u>Eucalyptus populnea</u>	"	1	<u>Hedysarum boreale</u>	Fabaceae	1
<u>Eucalyptus propinqua</u>	"	1	<u>Hedysarum caucasicum</u>	"	1
<u>Eucalyptus punctata</u>	"	2	<u>Hedysarum coronarium</u>	"	1
<u>Eucalyptus radiata</u>	"	1	<u>Hedysarum grandiflorum</u>	"	1
<u>Eucalyptus rigidula</u>	"	1	<u>Hedysarum varium</u>	"	1
<u>Eucalyptus robusta</u>	"	1	<u>Hedysarum vicioides</u>	"	1
<u>Eucalyptus rudis</u>	"	1	<u>Helianthus annuus</u>	Asteraceae	1
<u>Eucalyptus saligna</u>	"	1	<u>Hermodactylus flava</u>	Liliaceae	1
<u>Eucalyptus salubris</u>	"	1	<u>Hesperis matronalis</u>	Brassicaceae	1
<u>Eucalyptus sclerophylla</u>	"	1	<u>Hierochloa odorata</u>	Poaceae	1
<u>Eucalyptus sepulcralis</u>	"	1	<u>Hippophae rhamnoides</u>	Elaeagnaceae	1
<u>Eucalyptus siderophloia</u>	"	1	<u>Hymenosporum flavum</u>	Pittosporaceae	1
<u>Eucalyptus sideroxylon</u>	"	1	<u>Hyparrhenia hirta</u>	Poaceae	1
<u>Eucalyptus socialis</u>	"	1	<u>Ilex verticillata</u>	Aquifoliaceae	6
<u>Eucalyptus spathulata</u>	"	1	<u>Iris missouriensis</u>	Iridaceae	1
<u>Eucalyptus staeri</u>	"	1	<u>Iris setosa</u>	"	2
<u>Eucalyptus stowardii</u>	"	1	<u>Juglans nigra</u>	Juglandaceae	1
<u>Eucalyptus tetraptera</u>	"	1	<u>Juniperus ashei</u>	Cupressaceae	1
<u>Eucalyptus torquata</u>	"	1	<u>Juniperus cedrus</u>	"	1
<u>Eucalyptus trivalvis</u>	"	1	<u>Juniperus chinensis</u>	"	3
<u>Eucalyptus uncinata</u>	"	1	<u>Juniperus communis</u>	"	13
<u>Eucalyptus viminalis</u>	"	2	<u>Juniperus oxycedrus</u>	"	3
<u>Eucalyptus wandoo</u>	"	1	<u>Juniperus phoenicea</u>	"	6
<u>Eucalyptus yalatensis</u>	"	1	<u>Juniperus sabina</u>	"	2

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Juniperus sargentii</u>	Cupressaceae	1	<u>Lupinus arcticus</u>	Fabaceae	1
<u>Juniperus virginiana</u>	"	6	<u>Malus baccata</u>	Rosaceae	1
<u>Kennedya nigricans</u>	Fabaceae	1	<u>Malus hupehensis</u>	"	1
<u>Kobresia myosuroides</u>	Cyperaceae	1	<u>Medicago polymorpha</u>	Fabaceae	1
<u>Koeleria cristata</u>	Poaceae	1	<u>Melaleuca brevifolia</u>	Myrtaleae	1
<u>Kunzea ambigua</u>	Myrtaceae	1	<u>Melaleuca elliptica</u>	"	1
<u>Lathyrus japonicus</u>	Fabaceae	6	<u>Melaleuca ericifolia</u>	"	1
<u>Lathyrus sylvestris</u>	"	1	<u>Melaleuca huegelii</u>	"	1
<u>Leersia oryzoides</u>	Poaceae	1	<u>Melaleuca hypericifolia</u>	"	2
<u>Leptospermum flavescens</u>	Myrtaceae	1	<u>Melaleuca incana</u>	"	1
<u>Leptospermum juniperinum</u>	"	2	<u>Melaleuca lanceolata</u>	"	2
<u>Leptospermum laevigatum</u>	"	1	<u>Melaleuca linariifolia</u>	"	1
<u>Leptospermum liversidgei</u>	"	1	<u>Melaleuca monticola</u>	"	1
<u>Leptospermum obovatum</u>	"	1	<u>Melaleuca nesophila</u>	"	1
<u>Leptospermum petersonii</u>	"	1	<u>Melaleuca noposa</u>	"	1
<u>Leptospermum scoparium</u>	"	1	<u>Melaleuca squarrosa</u>	"	1
<u>Leptospermum squarrosum</u>	"	1	<u>Melaleuca styphelioides</u>	"	1
<u>Liatris spicata</u>	Asteraceae	1	<u>Melaleuca thymifolia</u>	"	1
<u>Ligustrum ibota</u>	Oleaceae	2	<u>Mimulus lewisii</u>	Scrophulariaceae	2
<u>Lobelia cardinalis</u>	Campanulaceae	1	<u>Monarda fistulosa</u>	Lamiaceae	2
<u>Lobelia fulgens</u>	"	1	<u>Myrica cerifera</u>	Myricaceae	2
<u>Lolium perenne</u>	Poaceae	8	<u>Myrica pennsylvanica</u>	"	1
<u>Lolium temulentum</u>	Poaceae	1	<u>Oxytropis campestris</u>	Fabaceae	4
<u>Lomatium dissectum</u>	Umbelliferae	1	<u>Panicum virgatum</u>	Poaceae	2
<u>Lomatium grayi</u>	"	1	<u>Papaver alboreseum</u>	Papaveraceae	1
<u>Lomatium triternatum</u>	"	1	<u>Papaver lapponicum</u>	"	1
<u>Lonicera chrysantha</u>	Caprifoliaceae	1	<u>Parthenocissus tricuspidata</u>	Vitaceae	1
<u>Lonicera coerulia</u>	"	1	<u>Paspalum dilatatum</u>	Poaceae	1
<u>Lonicera kokolkowi</u>	"	1	<u>Paspalum paspalodes</u>	"	1
<u>Lonicera maackii</u>	"	1	<u>Paspalum stoloniferum</u>	"	1
<u>Lonicera micrantha</u>	"	1	<u>Penstemon alpinus</u>	Scrophulariaceae	1
<u>Lonicera tatarica</u>	"	1	<u>Penstemon barbatus</u>	"	1
<u>Lotus tenuis</u>	Fabaceae	2	<u>Penstemon californicus</u>	"	1
<u>Lotus uliginosus</u>	"	1			



<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Penstemon calycosus</u>	Scrophulariaceae	1	<u>Picea engelmannii</u>	Pinaceae	1
<u>Penstemon campanulatus</u>	"	2	<u>Picea pungens</u>	"	1
<u>Penstemon cobaea</u>	"	1	<u>Pinus banksiana</u>	Pinaceae	2
<u>Penstemon confertus</u>	"	2	<u>Pinus brutia</u>	"	1
<u>Penstemon cyananthus</u>	"	2	<u>Pinus bungeana</u>	"	1
<u>Penstemon davidsonii</u>	"	1	<u>Pinus canariensis</u>	"	2
<u>Penstemon diffusus</u>	"	1	<u>Pinus cembra</u>	"	5
<u>Penstemon fruticosa</u>	"	1	<u>Pinus contorta</u>	"	1
<u>Penstemon gentianoides</u>	"	1	<u>Pinus densiflora</u>	"	1
<u>Penstemon glaber</u>	"	1	<u>Pinus echinata</u>	"	1
<u>Penstemon heterophyllus</u>	"	2	<u>Pinus excelsa</u>	"	2
<u>Penstemon hirsutus</u>	"	1	<u>Pinus halepensis</u>	"	6
<u>Penstemon hybridus</u>	"	1	<u>Pinus lambertiana</u>	"	1
<u>Penstemon murrayanus</u>	"	1	<u>Pinus monticola</u>	"	2
<u>Penstemon procerus</u>	"	2	<u>Pinus mugo</u>	"	1
<u>Penstemon serrulatus</u>	"	2	<u>Pinus nigra</u>	"	3
<u>Penstemon speciosa</u>	"	1	<u>Pinus pallasiana</u>	"	1
<u>Penstemon truticosus</u>	"	1	<u>Pinus parvifolia</u>	"	2
<u>Penstemon venustus</u>	"	1	<u>Pinus peuce</u>	"	4
<u>Phalaris aquatica</u>	Poaceae	2	<u>Pinus pinaster</u>	"	1
<u>Phalaris arundinacea</u>	"	4	<u>Pinus pinea</u>	"	8
<u>Phalaris canariensis</u>	"	1	<u>Pinus ponderosa</u>	"	1
<u>Philadelphus caucasicus</u>	Philadelphaceae	1	<u>Pinus pumila</u>	"	1
<u>Philadelphus pubescens</u>	"	1	<u>Pinus sabiniana</u>	"	1
<u>Philadelphus satsumanus</u>	"	1	<u>Pinus sosnovskyi</u>	"	1
<u>Philadelphus yokohamae</u>	"	1	<u>Pinus strobus</u>	"	2
<u>Phleum alpinum</u>	Poaceae	3	<u>Pinus sylvestris</u>	"	3
<u>Phleum commutatum</u>	"	4	<u>Pinus thunbergii</u>	"	1
<u>Phleum pratense</u>	"	15	<u>Pinus uncinata</u>	"	1
<u>Photina villosa</u>	Rosaceae	2	<u>Pinus virginiana</u>	"	1
<u>Physocarpus amurensis</u>	Rosaceae	1	<u>Pinus wallachiana</u>	"	2
<u>Physocarpus bracteatus</u>	"	1	<u>Plantago maritima</u>	Plantaginaceae	9
<u>Physocarpus intermedius</u>	"	2	<u>Platycladus orientalis</u>	Cupressaceae	1
<u>Physicarpus opulifolius</u>	"	2	<u>Poa alpigena</u>	Poaceae	1

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Poa alpina</u>	Poaceae	6	<u>Rhus copallina</u>	Anacardiaceae	1
<u>Poa compressa</u>	"	8	<u>Rhus glabra</u>	"	2
<u>Poa glauca</u>	"	1	<u>Rhus typhina</u>	"	2
<u>Podocarpus totara</u>	Podocarpaceae	1	<u>Ribes americanum</u>	Grossulariaceae	2
<u>Polemonium coeruleum</u>	Polemoniaceae	1	<u>Ribes aureum</u>	"	2
<u>Populus nigra</u>	Salicaceae	1	<u>Ribes petraeum</u>	"	2
<u>Potentilla fruticosa</u>	Rosaceae	2	<u>Rosa acicularis</u>	Rosaceae	1
<u>Prunus armeniaca</u>	Rosaceae	1	<u>Rosa canina</u>	"	6
<u>Prunus avium</u>	"	1	<u>Rosa damascena</u>	"	1
<u>Prunus cerasifera</u>	"	1	<u>Rosa eglanteria</u>	"	1
<u>Prunus dulcis</u>	"	2	<u>Rosa foetida</u>	"	1
<u>Prunus gravesii</u>	"	1	<u>Rosa gallica</u>	"	2
<u>Prunus ilicifolia</u>	"	1	<u>Rosa glauca</u>	"	1
<u>Prunus occidentalis</u>	"	1	<u>Rosa hugonis</u>	"	1
<u>Prunus padus</u>	"	1	<u>Rosa majalis</u>	"	1
<u>Prunus serotina</u>	"	5	<u>Rosa micrantha</u>	"	1
<u>Prunus spinosa</u>	"	2	<u>Rosa moyesii</u>	"	1
<u>Prunus tenella</u>	"	1	<u>Rosa nitida</u>	"	1
<u>Prunus tomentosa</u>	"	1	<u>Rosa omeiensis</u>	"	1
<u>Prunus virginiana</u>	"	1	<u>Rosa palustris</u>	"	1
<u>Psathyrostachys juncea</u>	Poaceae	1	<u>Rosa pendulina</u>	"	2
<u>Psoralea bituminosa</u>	Fabaceae	1	<u>Rosa pimpinellifolia</u>	"	1
<u>Puccinellia distans</u>	Poaceae	1	<u>Rosa rugosa</u>	"	4
<u>Reseda luteola</u>	Resedaceae	3	<u>Rosa setigera</u>	"	1
<u>Rhamnus catharticus</u>	Rhamnaceae	5	<u>Rosa speciosa</u>	"	1
<u>Rhamnus davuricus</u>	"	1	<u>Rosa sweginzowii</u>	"	1
<u>Rhamnus japonicus</u>	"	1	<u>Rosa villosa</u>	"	1
<u>Rhododendron brachycarpum</u>	Eriaceae	1	<u>Rosa virginiana</u>	"	1
<u>Rhododendron eriocarpum</u>	"	1	<u>Rosa vosagiaca</u>	"	1
<u>Rhododendron kaempferi</u>	"	2	<u>Rosa woodsii</u>	"	1
<u>Rhododendron kiusianum</u>	"	2	<u>Rubus fruticosus</u>	Rosaceae	1
<u>Rhododendron schleppenbachii</u>	"	1	<u>Rudbeckia hirta</u>	Asteraceae	1
<u>Rhododendron vaseyi</u>	"	1	<u>Rudbeckia purpurea</u>	"	1
			<u>Salix alba</u>	Salicaceae	1

<u>Name</u>	<u>Family</u>	<u>No.</u>	<u>Name</u>	<u>Family</u>	<u>No.</u>
<u>Salix herbacea</u>	Salicaceae	1	<u>Trifolium alpinum</u>	Fabaceae	1
<u>Salix pentandra</u>	"	2	<u>Trifolium arvense</u>	"	2
<u>Salix polaris</u>	"	1	<u>Trifolium incarnatum</u>	"	1
<u>Salix reticulata</u>	"	1	<u>Trifolium repens</u>	"	3
<u>Sambucus canadensis</u>	Caprifoliaceae	1	<u>Trifolium stellatum</u>	"	3
<u>Sambucus nigra</u>	"	8	<u>Triglochin maritimum</u>	Juncaginaceae	2
<u>Salix racemosa</u>	"	6	<u>Triglochin palustris</u>	"	4
<u>Sanguisorba minor</u>	Rosaceae	11	<u>Trisetum spicatum</u>	Poaceae	3
<u>Sanguisorba officinalis</u>	"	1	<u>Tsuga caroliniana</u>	Pinaceae	1
<u>Saponaria officinalis</u>	Caryophyllaceae	5	<u>Ulmus villosa</u>	Ulmaceae	1
<u>Schinus molle</u>	Anacardiaceae	1	<u>Vaccinium bracteatum</u>	Ericaceae	1
<u>Scirpus americanus</u>	Cyperaceae	1	<u>Vaccinium scoparium</u>	"	1
<u>Sedum acre</u>	Crassulaceae	1	<u>Vaccinium vitis-idaea</u>	"	1
<u>Silphium laciniatum</u>	Asteraceae	1	<u>Viburnum acerifolium</u>	Caprifoliaceae	5
<u>Siphonosmanthus delavayi</u>	Oleaceae	1	<u>Viburnum alnifolium</u>	"	1
<u>Solidago sempervirens</u>	Asteraceae	2	<u>Viburnum burejaeticum</u>	"	1
<u>Sophora viciifolia</u>	Fabaceae	1	<u>Viburnum cassinoides</u>	"	1
<u>Sorbaria sorbifolia</u>	Rosaceae	1	<u>Viburnum dentatum</u>	"	2
<u>Sorbus commixta</u>	Rosaceae	1	<u>Viburnum lantana</u>	"	10
<u>Sorbus decora</u>	"	1	<u>Viburnum lentago</u>	"	3
<u>Sphaeralcea umbellata</u>	Malvaceae	2	<u>Viburnum opulus</u>	"	4
<u>Spiraea chamaedryfolia</u>	Rosacea	1	<u>Viburnum prunifolium</u>	"	2
<u>Spiraea japonica</u>	"	1	<u>Viburnum sargentii</u>	"	1
<u>Symphoricarpos albus</u>	Caprifoliaceae	4	<u>Viburnum schensianum</u>	"	1
<u>Symphoricarpos orbiculatus</u>	"	1	<u>Viburnum trilobum</u>	"	1
<u>Tagetes patula</u>	Asteraceae	1	<u>Vicia americana</u>	Fabaceae	1
<u>Thuja occidentalis</u>	Cupressaceae	4	<u>Vicia cracca</u>	"	13
<u>Thuja orientalis</u>	"	5	<u>Vicia orobus</u>	"	1
<u>Tilia cordata</u>	Tiliaceae	1	<u>Vicia sativa ssp. nigra</u>	"	59
<u>Tilia japonica</u>	"	1	<u>Vicia sepium</u>	"	14
			<u>Vicia tenuifolia</u>	"	1
			<u>Vicia species</u>	"	40





APPENDIX III  
PLANT MATERIALS RECEIVED  
FROM  
SEA REGIONAL PLANT INTRODUCTION STATIONS



## Plant Materials Acquired from SEA Regional Plant Introduction Stations

The NPMC serves as coordinator for the acquisition of all accessions from regional plant introduction stations for use by field plant materials centers. These regional plant introduction stations of the Science and Education Administration are located at Geneva, New York; Ames, Iowa; Experiment, Georgia; and Pullman, Washington.

Following is a list of the 319 accessions of 51 species collected during 1981:

<u>Species</u>	<u>Accessions</u>	<u>Station</u>
<u>Agropyron elongatum</u>	5	Pullman
<u>Amelanchier alnifolia</u>	2	Ames
<u>Astragalus alopecurus</u>	1	Pullman
<u>Astragalus alpinus</u>	2	
<u>Astragalus angustifolius</u>	1	
<u>Astragalus armeneacus</u>	1	
<u>Astragalus bisulcatus</u>	2	
<u>Astragalus boeticus</u>	2	
<u>Astragalus bungeanus</u>	3	
<u>Astragalus campylorhynchus</u>	3	
<u>Astragalus canadensis</u>	3	
<u>Astragalus cicer</u>	51	
<u>Astragalus coluteocarpus</u>	1	
<u>Astragalus comixtus</u>	1	
<u>Astragalus cornutus</u>	1	
<u>Astragalus corrugatus</u>	1	
<u>Astragalus glycyphylloides</u>	1	
<u>Astragalus interpositus</u>	1	
<u>Astragalus lasioglottis</u>	1	
<u>Astragalus longifloris</u>	1	

<u>Species</u>	<u>Accessions</u>	<u>Station</u>
<u>Astragalus mexicanus</u>	1	
<u>Astragalus miser</u>	1	
<u>Astragalus onobrychis</u>	1	
<u>Astragalus podocarpus</u>	1	
<u>Astragalus recollectus</u>	1	
<u>Astragalus scorpioides</u>	2	
<u>Astragalus scorpiurus</u>	1	
<u>Astragalus sesameus</u>	2	
<u>Astragalus stella</u>	1	
<u>Astragalus stevianus</u>	1	
<u>Astragalus stipulatus</u>	1	
<u>Astragalus striatus</u>	2	
<u>Astragalus subumbellatus</u>	1	
<u>Astragalus tremestris</u>	1	
<u>Astragalus sp.</u>	2	
<u>Bromus carinatus</u>	10	Ames
<u>Danthonia californica</u>	1	Pullman
<u>Elymus canadensis</u>	5	Pullman
<u>Festuca occidentalis</u>	4	Pullman
<u>Lolium perenne</u>	93	Pullman
<u>Lotus caucasicus</u>	6	Geneva
<u>Lotus corniculatus</u>	8	Geneva
<u>Lotus frondosus</u>	1	Geneva
<u>Lotus sp.</u>	1	Geneva
<u>Trifolium ambiguum</u>	47	Geneva



<u>Species</u>	<u>Accessions</u>	<u>Station</u>
<u>Trifolium arvense</u>	1	Experiment
<u>Trifolium pratense</u>	9	Geneva
<u>Trifolium repens</u>	3	Geneva
<u>Vicia cracca</u>	7	Experiment
<u>Vicia tenuifolia</u>	8	Experiment
<u>Vicia tetrasperma</u>	3	



APPENDIX IV  
ACCESSIONS PLANTED (1981)





## Accessions Planted - 1981

One hundred fifteen different accessions were planted on the center during 1981. The plantings were made to:

1. Increase small amounts of available seed
2. Check identity
3. Reproduce aging seed in order to maintain viable seed in storage
4. Note plant performance

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>
Grasses		
T-13886	<u>Dactylis glomerata</u>	Netherlands
T-14362	<u>Dactylis glomerata</u>	Israel
T-14606	<u>Dactylis glomerata</u>	Netherlands
T-15405	<u>Dactylis glomerata</u>	Italy
T-22055	<u>Dactylis glomerata</u>	France
T-22107	<u>Dactylis glomerata</u>	France
T-13949	<u>Elymus arenarius</u>	England
T-14162	<u>Elymus arenarius</u>	Russia
T-15555	<u>Elymus arenarius</u>	Belgium
T-15935	<u>Elymus arenarius</u>	Russia
T-16380	<u>Elymus arenarius</u>	Finland
T-20755	<u>Elymus arenarius</u>	E. Germany
T-20892	<u>Elymus arenarius</u>	Denmark
T-20893	<u>Elymus arenarius</u>	Denmark
T-17857	<u>Elymus canadensis</u>	Belgium
T-22058	<u>Elymus canadensis</u>	France
PI-21604	<u>Elymus caput-medusae</u>	France
T-15556	<u>Elymus condensatus</u>	Belgium

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>
Grasses (contd.)		
T-20756	<u>Elymus condensatus</u>	E. Germany
T-22059	<u>Elymus europaeus</u>	France
T-22108	<u>Elymus farctus</u>	Portugal
T-21605	<u>Elymus giganteus</u>	France
T-21246	<u>Elymus paboanus</u>	Russia
T-21002	<u>Elymus pycnanthus</u>	Portugal
T-21247	<u>Elymus racemosus</u>	Russia
T-14818	<u>Elymus virginicus</u>	Portugal
T-20758	<u>Elymus virginicus</u>	E. Germany
T-18841	<u>Koeleria cristata</u>	France
T-22061	<u>Koeleria cristata</u>	France
T-20798	<u>Psathyrostachys juncea</u>	E. Germany
Legumes		
T-12837	<u>Biserrula pelecinus</u>	France
T-14794	<u>Biserrula pelecinus</u>	Portugal
T-20752	<u>Dolichos cembra</u>	E. Germany
T-14816	<u>Dolichos jacquinii</u>	Portugal
T-14829	<u>Dolichos lablab</u>	Portugal
T-15553	<u>Dolichos lablab</u>	Belgium
T-18827	<u>Dolichos lablab</u>	France
T-20753	<u>Dolichos lablab</u>	E. Germany
T-23124	<u>Dolichos lablab</u>	Czechoslovakia
T-26204	<u>Dolichos lablab</u>	France
T-15345	<u>Dolichos ornatus</u>	France

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>
Legumes (contd.)		
T-18828	<u>Dolichos ornatus</u>	France
T-20754	<u>Dolichos ornatus</u>	E. Germany
T-24009	<u>Dolichos zebra</u>	England
PI-440476	<u>Lotus caucasicus</u>	Russia
PI-440477	<u>Lotus caucasicus</u>	Russia
PI-440478	<u>Lotus caucasicus</u>	Russia
PI-440479	<u>Lotus caucasicus</u>	Russia
PI-440480	<u>Lotus caucasicus</u>	Russia
PI-440481	<u>Lotus caucasicus</u>	Russia
PI-440482	<u>Lotus corniculatus</u>	Russia
PI-440483	<u>Lotus corniculatus</u>	Russia
PI-440484	<u>Lotus corniculatus</u>	Russia
PI-440485	<u>Lotus corniculatus</u>	Russia
PI-440486	<u>Lotus frondosus</u>	Russia
T-17743	<u>Lotus pedunculatus</u>	Spain
T-14836	<u>Lotus uliginosus</u>	Portugal
T-15358	<u>Lotus uliginosus</u>	France
T-18026	<u>Lotus uliginosus</u>	Netherlands
T-18846	<u>Lotus uliginosus</u>	France
T-20776	<u>Lotus uliginosus</u>	E. Germany
T-20957	<u>Lotus uliginosus</u>	E. Germany
T-21624	<u>Lotus uliginosus</u>	France
T-22064	<u>Lotus uliginosus</u>	France
PI-440487	<u>Lotus sp.</u>	Russia
T-18440	<u>Macroptilium atropurpureum</u>	West Indies

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>
Legumes (contd.)		
T-18441	<u>Macroptilium atropurpureum</u>	West Indies
T-18442	<u>Macroptilium atropurpureum</u>	West Indies
T-18443	<u>Macroptilium atropurpureum</u>	West Indies
T-18444	<u>Macroptilium atropurpureum</u>	West Indies
T-18445	<u>Macroptilium atropurpureum</u>	West Indies
T-18446	<u>Macroptilium atropurpureum</u>	West Indies
T-18447	<u>Macroptilium atropurpureum</u>	West Indies
T-18448	<u>Macroptilium atropurpureum</u>	West Indies
T-18449	<u>Macroptilium atropurpureum</u>	West Indies
T-18450	<u>Macroptilium atropurpureum</u>	West Indies
T-18451	<u>Macroptilium atropurpureum</u>	West Indies
T-18452	<u>Macroptilium atropurpureum</u>	West Indies
T-18453	<u>Macroptilium atropurpureum</u>	West Indies
T-14366	<u>Medicago polymorpha</u>	Israel
T-14840	<u>Medicago polymorpha</u>	Portugal
T-15363	<u>Medicago polymorpha</u>	France
T-17945	<u>Medicago polymorpha</u>	Russia
T-18456	<u>Medicago polymorpha</u>	Czechoslovakia
T-18466	<u>Medicago polymorpha</u>	Czechoslovakia
T-22144	<u>Medicago polymorpha</u>	Portugal
T-12466	<u>Teramnus labialis</u>	France
T-18454	<u>Teramnus labialis</u>	West Indies
T-18455	<u>Teramnus labialis</u>	West Indies
T-18456	<u>Teramnus labialis</u>	West Indies



<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>
Legumes (contd.)		
T-18457	<u>Teramnus labialis</u>	West Indies
PI-440703	<u>Trifolium ambiguum</u>	Russia
PI-440736	<u>Trifolium pratense</u>	Russia
PI-440737	<u>Trifolium pratense</u>	Russia
PI-440738	<u>Trifolium pratense</u>	Russia
PI-440739	<u>Trifolium pratense</u>	Russia
PI-440740	<u>Trifolium pratense</u>	Russia
PI-440741	<u>Trifolium pratense</u>	Russia
PI-440742	<u>Trifolium pratense</u>	Russia
PI-440743	<u>Trifolium pratense</u>	Russia
PI-440744	<u>Trifolium pratense</u>	Russia
PI-440745	<u>Trifolium repens</u>	Russia
PI-440746	<u>Trifolium repens</u>	Russia
PI-440747	<u>Trifolium repens</u>	Russia
PI-440753	<u>Vicia cracca</u>	Russia
PI-440754	<u>Vicia cracca</u>	Russia
PI-440755	<u>Vicia cracca</u>	Russia
PI-440757	<u>Vicia cracca</u>	Russia
PI-440758	<u>Vicia cracca</u>	Russia
PI-440759	<u>Vicia cracca</u>	Russia
PI-440760	<u>Vicia cracca</u>	Russia
T-18459	<u>Vigna luteola</u>	West Indies
T-18460	<u>Vigna luteola</u>	West Indies
T-18461	<u>Vigna luteola</u>	West Indies
Others		
T-23033	<u>Eriogonum giganteum</u>	France



APPENDIX V  
SEED PRODUCTION (1981)





## Seed Production - 1981

During 1981 the National Plant Materials Center produced seed of 254 accessions of 69 species of plants which were requested by field PMCs.

### Grasses

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
229529	<u>Alopecurus arundinaceus</u>	Iran	Trace
T-6643	<u>Alopecurus pratensis</u>	France	Trace
380671	<u>Alopecurus pratensis</u>	Iran	Trace
380672	<u>Alopecurus pratensis</u>	Iran	Trace
380673	<u>Alopecurus pratensis</u>	Iran	Trace
T-7131	<u>Bromus ramosus</u> ssp. <u>benekeni</u>	Denmark	3
380772	<u>Bromus tomentellus</u>	Iran	16
380775	<u>Bromus tomentellus</u>	Iran	Trace
384811	<u>Bromus tomentellus</u>	Iran	1
384817	<u>Bromus tomentellus</u>	Iran	Trace
384818	<u>Bromus tomentellus</u>	Iran	3
286474	<u>Calamagrostis arundinacea</u>	Japan	Trace
T-10474	<u>Dactylis glomerata</u>	Norway	2
T-11447	<u>Dactylis glomerata</u>	Romania	28
T-11464	<u>Dactylis glomerata</u>	Romania	6
T-11477	<u>Dactylis glomerata</u>	Romania	13
T-11492	<u>Dactylis glomerata</u>	Romania	2
T-13886	<u>Dactylis glomerata</u>	Netherlands	Trace
T-14606	<u>Dactylis glomerata</u>	Netherlands	Trace
T-15405	<u>Dactylis glomerata</u>	Italy	1
T-22055	<u>Dactylis glomerata</u>	France	Trace
T-22107	<u>Dactylis glomerata</u>	France	1

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
368881	<u>Dactylis glomerata</u> ssp.	Portugal	Trace
T-12677	<u>Dactylis glomerata</u> ssp. <u>woronoi</u>	Wales	2
T-7149	<u>Dactylis marina</u>	Portugal	4
T-10476	<u>Dactylis polygama</u>	Denmark	54
T-11430	<u>Dactylis polygama</u>	Romania	6
T-12548	<u>Dactylis polygama</u>	W. Germany	60
T-12675	<u>Dactylis polygama</u>	W. Germany	Trace
T-10477	<u>Danthonia spicata</u>	Canada	Trace
T-6777	<u>Deschampsia cespitosa</u>	Norway	Trace
T-10478	<u>Elymus arenarius</u>	Denmark	Trace
T-12326	<u>Elymus arenarius</u>	W. Germany	134
345978	<u>Elymus arenarius</u>	Norway	127
T-15556	<u>Elymus condensatus</u>	Belgium	Trace
T-20756	<u>Elymus condensatus</u>	Greece	Trace
T-10481	<u>Elymus virginicus</u>	Canada	170
T-12947	<u>Elymus virginicus</u>	France	151
T-20758	<u>Elymus virginicus</u>	Greece	36
T-10486	<u>Lolium perenne</u>	Italy	157
T-11520	<u>Lolium perenne</u>	Romania	172
T-11521	<u>Lolium perenne</u>	Romania	137
T-11522	<u>Lolium perenne</u>	Romania	114
T-12381	<u>Lolium perenne</u>	France	16
T-12682	<u>Lolium perenne</u>	Italy	14
T-12683	<u>Lolium perenne</u>	Italy	71
T-12684	<u>Lolium perenne</u>	Italy	3
T-12686	<u>Lolium perenne</u>	Romania	163

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-12688	<u>Lolium perenne</u>	Romania	131
T-12690	<u>Lolium perenne</u>	Italy	22
T-12691	<u>Lolium perenne</u>	Italy	64
T-12692	<u>Lolium perenne</u>	Italy	12
T-12693	<u>Lolium perenne</u>	Italy	13
T-12694	<u>Lolium perenne</u>	Italy	26
T-12695	<u>Lolium perenne</u>	Italy	9
T-12696	<u>Lolium perenne</u>	Italy	17
T-12698	<u>Lolium perenne</u>	Belgium	6
T-12699	<u>Lolium perenne</u>	Belgium	75
T-12700	<u>Lolium perenne</u>	Luxembourg	29
T-12701	<u>Lolium perenne</u>	Luxembourg	74
T-12702	<u>Lolium perenne</u>	France	67
T-12703	<u>Lolium perenne</u>	France	62
T-12704	<u>Lolium perenne</u>	France	19
T-12705	<u>Lolium perenne</u>	France	35
T-12706	<u>Lolium perenne</u>	France	21
T-12707	<u>Lolium perenne</u>	France	37
T-12708	<u>Lolium perenne</u>	Switzerland	34
T-12709	<u>Lolium perenne</u>	Switzerland	60
T-12710	<u>Lolium perenne</u>	Switzerland	36
T-12711	<u>Lolium perenne</u>	Switzerland	20
T-12712	<u>Lolium perenne</u>	Switzerland	7
T-12713	<u>Lolium perenne</u>	France	38
T-12714	<u>Lolium perenne</u>	France	37
T-12715	<u>Lolium perenne</u>	France	54

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-12716	<u>Lolium perenne</u>	France	3
T-12717	<u>Lolium perenne</u>	France	Trace
T-12718	<u>Lolium perenne</u>	France	71
T-12719	<u>Lolium perenne</u>	France	109
T-12720	<u>Lolium perenne</u>	Sweden	138
T-12721	<u>Lolium perenne</u>	W. Germany	81
T-12722	<u>Lolium perenne</u>	W. Germany	46
T-12723	<u>Lolium perenne</u>	Iran	81
T-12724	<u>Lolium perenne</u>	Hungary	160
T-12993	<u>Lolium perenne</u>	France	30
409034	<u>Panicum maximum</u>	Brazil	Trace
339897	<u>Paspalum plicatulum</u>	Australia	Trace
<u>Legumes</u>			
T-10506	<u>Coronilla coronata</u>	W. Germany	8
T-10509	<u>Coronilla varia</u>	Canada	56
T-10913	<u>Coronilla varia</u>	Hungary	23
T-11417	<u>Coronilla varia</u>	Romania	14
T-11476	<u>Coronilla varia</u>	Romania	Trace
T-12674	<u>Coronilla varia</u>	Hungary	118
365436	<u>Cytisus hirsutus</u>	Belgium	12
T-11751	<u>Desmodium canadense</u>	Switzerland	103
312129	<u>Desmodium intortum</u>	Guatemala	Trace
T-20823	<u>Desmodium</u> sp.	Brazil	Trace
319471	<u>Desmodium</u> sp.	Tasmania	Trace
322505	<u>Desmodium</u> sp.	Brazil	12
T-20752	<u>Dolichos cembra</u>	Greece	295

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-10517	<u>Dolichos lablab</u>	Denmark	33
T-12678	<u>Dolichos lablab</u>	Switzerland	26
T-14829	<u>Dolichos lablab</u>	Portugal	240
T-15553	<u>Dolichos lablab</u>	Belgium	144
T-18827	<u>Dolichos lablab</u>	France	198
T-20753	<u>Dolichos lablab</u>	Greece	385
T-23124	<u>Dolichos lablab</u>	Czechoslovakia	179
T-26204	<u>Dolichos lablab</u>	France	68
T-27593	<u>Dolichos lablab</u>		240
T-15345	<u>Dolichos ornatus</u>	France	240
T-18828	<u>Dolichos ornatus</u>	France	138
T-20754	<u>Dolichos ornatus</u>	Greece	130
T-10521	<u>Dolichos sesquipedalis</u>	Denmark	32
T-24009	<u>Dolichos zebra</u>	England	49
440476	<u>Lotus caucasicus</u>	USSR	3
440477	<u>Lotus caucasicus</u>	USSR	13
440478	<u>Lotus caucasicus</u>	USSR	50
440480	<u>Lotus caucasicus</u>	USSR	9
440481	<u>Lotus caucasicus</u>	USSR	20
440479	<u>Lotus corniculatus</u>	USSR	4
440484	<u>Lotus corniculatus</u>	USSR	6
440485	<u>Lotus corniculatus</u>	USSR	Trace
440486	<u>Lotus frondosus</u>	USSR	Trace
T-12729	<u>Lotus pedunculatus</u>	Portugal	Trace
T-17743	<u>Lotus pedunculatus</u>	Spain	Trace
T-12730	<u>Lotus tenuis</u>	W. Germany	8



<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-12731	<u>Lotus uliginosus</u>	France	64
T-14836	<u>Lotus uliginosus</u>	Portugal	2
T-15358	<u>Lotus uliginosus</u>	France	Trace
T-18846	<u>Lotus uliginosus</u>	France	5
T-20776	<u>Lotus uliginosus</u>	Greece	75
T-20957	<u>Lotus uliginosus</u>	Greece	Trace
T-21624	<u>Lotus uliginosus</u>	France	13
T-22064	<u>Lotus uliginosus</u>	France	3
T-18751	<u>Lotus sp.</u>		Trace
T-27798	<u>Lotus sp.</u>		4
440487	<u>Lotus sp.</u>	USSR	39
T-28601	<u>Maakia amurensis</u>		24
T-18440	<u>Macroptilium atropurpureum</u>	West Indies	63
T-18441	<u>Macroptilium atropurpureum</u>	West Indies	45
T-18442	<u>Macroptilium atropurpureum</u>	West Indies	45
T-18443	<u>Macroptilium atropurpureum</u>	West Indies	30
T-18444	<u>Macroptilium atropurpureum</u>	West Indies	27
T-18445	<u>Macroptilium atropurpureum</u>	West Indies	16
T-18446	<u>Macroptilium atropurpureum</u>	West Indies	20
T-18447	<u>Macroptilium atropurpureum</u>	West Indies	17
T-18448	<u>Macroptilium atropurpureum</u>	West Indies	30
T-18449	<u>Macroptilium atropurpureum</u>	West Indies	11
T-18450	<u>Macroptilium atropurpureum</u>	West Indies	59
T-18451	<u>Macroptilium atropurpureum</u>	West Indies	28
T-18452	<u>Macroptilium atropurpureum</u>	West Indies	40
T-18453	<u>Macroptilium atropurpureum</u>	West Indies	29

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-12734	<u>Medicago polymorpha</u>	Crete	1
T-14366	<u>Medicago polymorpha</u>	Israel	34
T-14840	<u>Medicago polymorpha</u>	Portugal	7
T-18465	<u>Medicago polymorpha</u>	Czechoslovakia	2
T-10569	<u>Psoralea bituminosa</u>	France	Trace
T-11755	<u>Psoralea bituminosa</u>	Switzerland	Trace
T-13081	<u>Psoralea bituminosa</u>	Canary Islands	Trace
T-13082	<u>Psoralea bituminosa</u>	Canary Islands	1
297381	<u>Trifolium medium</u>	Norway	Trace
440736	<u>Trifolium pratense</u>	USSR	2
440737	<u>Trifolium pratense</u>	USSR	2
440738	<u>Trifolium pratense</u>	USSR	36
440739	<u>Trifolium pratense</u>	USSR	5
440740	<u>Trifolium pratense</u>	USSR	21
440741	<u>Trifolium pratense</u>	USSR	51
440742	<u>Trifolium pratense</u>	USSR	Trace
440743	<u>Trifolium pratense</u>	USSR	3
440744	<u>Trifolium pratense</u>	USSR	25
440745	<u>Trifolium pratense</u>	USSR	10
440746	<u>Trifolium repens</u>	USSR	21
440747	<u>Trifolium repens</u>	USSR	4
346068	<u>Vicia sepium</u>	Norway	7

Others

T-19019	<u>Achillea filipendulina</u>	Poland	20
T-6627	<u>Achillea millefolium</u>	Denmark	44

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-6628	<u>Achillea millefolium</u>	Denmark	43
T-6629	<u>Achillea millefolium</u>	Greenland	10
T-10600	<u>Achillea millefolium</u>	Canada	115
T-10601	<u>Achillea millefolium</u>	Denmark	17
T-10602	<u>Achillea millefolium</u>	Denmark	102
T-10603	<u>Achillea millefolium</u>	Greenland	3
T-10604	<u>Achillea millefolium</u>	Italy	15
T-10606	<u>Achillea millefolium</u>	Hungary	22
T-10607	<u>Achillea millefolium</u>	Hungary	66
T-10608	<u>Achillea millefolium</u>	Norway	16
T-10609	<u>Achillea millefolium</u>	France	111
T-10610	<u>Achillea millefolium</u>	France	34
T-10611	<u>Achillea millefolium</u>	USSR	19
T-11404	<u>Achillea millefolium</u>	Romania	248
T-11422	<u>Achillea millefolium</u>	Romania	104
T-11433	<u>Achillea millefolium</u>	Romania	35
T-11434	<u>Achillea millefolium</u>	Romania	21
T-11467	<u>Achillea millefolium</u>	Romania	103
T-11646	<u>Achillea millefolium</u>	Poland	1
T-12238	<u>Achillea millefolium</u>	France	7
T-12611	<u>Achillea millefolium</u>	Norway	96
T-12821	<u>Achillea millefolium</u>	France	26
T-10612	<u>Achillea ptarmica</u>	Denmark	3
T-11403	<u>Achillea ptarmica</u>	Romania	9
T-11647	<u>Achillea ptarmica</u>	W. Germany	13
T-12239	<u>Achillea ptarmica</u>	W. Germany	3

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-12240	<u>Achillea ptarmica</u>	France	Trace
T-12241	<u>Achillea ptarmica</u>	France	33
T-12242	<u>Achillea ptarmica</u>	France	2
T-12822	<u>Achillea ptarmica</u>	France	9
T-6672	<u>Artemisia vulgaris</u>	Denmark	Trace
T-10646	<u>Aster novae-angliae</u>	France	54
T-11654	<u>Aster novae-angliae</u>	Poland	19
T-12904	<u>Chrysopsis villosa</u>	France	165
T-10703	<u>Coreopsis lanceolata</u>	Canada	10
T-10704	<u>Coreopsis lanceolata</u>	France	13
T-10705	<u>Coreopsis lanceolata</u>	USSR	2
T-10993	<u>Coreopsis lanceolata</u>	England	21
T-12679	<u>Echinacea angustifolia</u>	W. Germany	4
T-7164	<u>Erigeron compositus</u>	Norway	Trace
T-10708	<u>Erigeron compositus</u>	Denmark	9
T-10709	<u>Erigeron pumilus</u>	Canada	92
T-10710	<u>Erigeron speciosus</u>	France	35
T-12331	<u>Erigeron speciosus</u>	France	60
T-13135	<u>Erigeron speciosus</u>	England	21
T-10711	<u>Gaillardia aristata</u>	Hungary	21
T-10713	<u>Gaillardia aristata</u>	France	66
T-10714	<u>Gaillardia aristata</u>	USSR	15
T-10715	<u>Gaillardia aristata</u>	Montana	8
T-10859	<u>Hesperis matronalis</u>	Canada	38
T-10861	<u>Hesperis matronalis</u>	USSR	2
T-10862	<u>Hesperis matronalis</u>	France	35

<u>PI or T Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-11022	<u>Hesperis matronalis</u>	Canada	10
T-11495	<u>Hesperis matronalis</u>	Romania	2
T-11690	<u>Hesperis matronalis</u>	Poland	97
T-12347	<u>Hesperis matronalis</u>	France	1
T-12971	<u>Hesperis matronalis</u>	France	9
380893	<u>Juncus</u> sp.	Ireland	5
T-10933	<u>Lobelia cardinalis</u>	Maryland	1
T-7028	<u>Monarda fistulosa</u>	Norway	11
T-10950	<u>Monarda fistulosa</u>	Canada	28
T-10952	<u>Monarda fistulosa</u>	France	6
T-12738	<u>Monarda fistulosa</u>	Poland	19
T-13143	<u>Penstemon hirsutum</u>	England	22
T-7056	<u>Potentilla recta</u>	Denmark	35
314474	<u>Potentilla recta</u>	USSR	104
T-7066	<u>Ranunculus acris</u>	Norway	Trace
T-10875	<u>Ranunculus acris</u>	USSR	11
T-10876	<u>Ranunculus acris</u> ssp. <u>friesianus</u>	Denmark	3
T-7069	<u>Ranunculus repens</u>	Norway	1
420257	<u>Reseda lutea</u>	Iran	3
383745	<u>Rosa</u> sp.	Turkey	34
T-10737	<u>Rudbeckia hirta</u>	Canada	5
T-10738	<u>Rudbeckia hirta</u>	Maryland	39
T-11180	<u>Rudbeckia hirta</u>	Canada	30
T-7089	<u>Saponaria officinalis</u>	Denmark	170
T-10740	<u>Senecio canus</u>	Canada	Trace
T-7098	<u>Tanacetum vulgare</u>	Norway	52
T-7099	<u>Tanacetum vulgare</u>	Norway	15



APPENDIX VI  
DOMESTIC DISTRIBUTION - SEED - SCS



Domestic Distribution - Seed - SCS

Alaska - Alaska Plant Materials Center, Palmer

<u>Abies balsamea</u>	1	<u>Oxytropis campestris</u> ssp. <u>campestris</u>	1
<u>Abies balsamea</u> var. <u>phanerolepsis</u>	3	<u>Oxytropis campestris</u> ssp. <u>sordida</u>	2
<u>Alnus crispa</u>	2	<u>Oxytropis campestris</u> var. <u>Cusickii</u>	1
<u>Alnus crispa</u> var. <u>mollis</u>	2	<u>Oxytropis campestris</u> var. <u>gracilis</u>	1
<u>Alnus incana</u>	13	<u>Papaver alboroseum</u>	1
<u>Alnus incana</u> f. <u>pinnatifixa</u>	1	<u>Papaver alboroseum</u> var. <u>elongatum</u>	1
<u>Amelanchier alnifolia</u>	4	<u>Papaver lapponicum</u>	2
<u>Amelanchier alnifolia</u> var. <u>Cusickii</u>	1	<u>Phleum commutatum</u>	4
<u>Amelanchier florida</u>	1	<u>Plantago maritima</u>	9
<u>Astragalus alpinus</u>	1	<u>Plantago maritima</u> ssp. <u>borealis</u>	1
<u>Astragalus alpinus</u> ssp. <u>alpinus</u>	1	<u>Salix glauca</u> var. <u>villosa</u>	1
<u>Astragalus alpinus</u> ssp. <u>arcticus</u>	5	<u>Salix herbacea</u>	1
<u>Calamagrostis lapponica</u>	1	<u>Salix lantana</u>	1
<u>Carex bigelowii</u>	2	<u>Salix petandra</u>	1
<u>Carex lachenalii</u>	3	<u>Salix reticulata</u>	1
<u>Carex saxatilis</u>	3	<u>Salix reticulata</u> ssp. <u>nivalis</u>	1
<u>Chamaenerion angustifolium</u>	9	<u>Salix reticulata</u> ssp. <u>reticulata</u>	1
<u>Chamaenerion latifolium</u>	2	<u>Triglochin maritimum</u>	2
<u>Dryas drummondii</u>	2	<u>Triglochin palustre</u>	4
<u>Dryas drummondii</u> var. <u>drummondii</u>	1	Arizona - Tucson Plant Materials Center	
<u>Dryas octopetala</u>	11	<u>Melaleuca adnata</u>	1
<u>Epilobium angustifolium</u>	5	<u>Melaleuca capitata</u>	1
<u>Epilobium latifolium</u>	2	<u>Melaleuca viridiflora</u>	1
<u>Epilobium latifolium</u> ssp. <u>latifolium</u>	1	<u>Melaleuca</u> sp.	1
<u>Epilobium latifolium</u> f. <u>tenuifolium</u>	1	<u>Poa alpina</u>	9
<u>Eriophorum angustifolium</u>	3	<u>Poa alpina</u> var. <u>brevifolia</u>	1
<u>Hierochloa odorata</u>	1	<u>Poa alpina</u> var. <u>vivapara</u>	2
<u>Kobresia myosuroides</u>	1	<u>Poa ampla</u>	3
<u>Lathyrus japonicus</u>	3	<u>Poa angustifolia</u>	5
<u>Lathyrus japonicus</u> ssp. <u>maritimus</u>	15	<u>Poa canbyi</u>	1
<u>Lupinus arcticus</u>	6	<u>Poa glaucantha</u>	2
<u>Lupinus arcticus</u> var. <u>prunophilus</u>	1	<u>Poa interior</u>	1
<u>Oxytropis campestris</u>	3	<u>Poa palustris</u>	2

Arizona - Tucson Plant Materials Center (contd.)

<u>Poa pratensis</u>	2	<u>Acacia floribunda</u>	1
<u>Poa supina</u>	1	<u>Acacia genistifolia</u>	1
<u>Poa sylvicola</u>	1	<u>Acacia gracifolia</u>	1
<u>Poa trivialis</u>	12	<u>Acacia hakeloides</u>	1
<u>Stipa barbata</u>	8	<u>Acacia horrida</u>	1
<u>Stipa bromoides</u>	1	<u>Acacia howittii</u>	1
<u>Stipa capillata</u>	1	<u>Acacia imbricata</u>	1
<u>Stipa hyalina</u>	1	<u>Acacia implexa</u>	1
<u>Stipa lagascae</u>	2	<u>Acacia iteaphylla</u>	2
<u>Stipa megapotamica</u>	1	<u>Acacia juniperina</u>	1
<u>Stipa splendens</u>	1	<u>Acacia karroo</u>	3
<u>Stipa sp.</u>	2	<u>Acacia lasiocalyx</u>	1

California - Lockeford Plant Materials Center

		<u>Acacia leiophylla</u>	1
<u>Acacia accola</u>	1	<u>Acacia linifolia</u>	1
<u>Acacia acinacea</u>	1	<u>Acacia longifolia</u>	4
<u>Acacia alata</u>	1	<u>Acacia maidenii</u>	1
<u>Acacia aneura</u>	1	<u>Acacia mearnsii</u>	1
<u>Acacia baileyana</u>	1	<u>Acacia melanoxylon</u>	4
<u>Acacia beckleri</u>	1	<u>Acacia merrallii</u>	2
<u>Acacia brachybotrya</u>	1	<u>Acacia microcarpa</u>	1
<u>Acacia buxifolia</u>	1	<u>Acacia mucronata</u>	1
<u>Acacia calamifolia</u>	1	<u>Acacia neriifolia</u>	1
<u>Acacia catechu</u>	1	<u>Acacia notabilis</u>	1
<u>Acacia cognata</u>	1	<u>Acacia oswaldii</u>	1
<u>Acacia conspersa</u>	1	<u>Acacia oxycedrus</u>	1
<u>Acacia cyanophylla</u>	1	<u>Acacia parvipinnula</u>	1
<u>Acacia cyclops</u>	2	<u>Acacia paucijuga</u>	1
<u>Acacia dealbata</u>	2	<u>Acacia penninervens</u>	1
<u>Acacia dealbata</u> var. <u>gaulois</u>	1	<u>Acacia prominens</u>	1
<u>Acacia dealbata</u> var. <u>mirandole</u>	1	<u>Acacia pulchella</u>	1
<u>Acacia deanei</u>	1	<u>Acacia pycnantha</u>	4
<u>Acacia decura</u>	1	<u>Acacia quornensis</u>	1
<u>Acacia difformis</u>	1	<u>Acacia retinoides</u>	5
<u>Acacia eburnea</u>	1	<u>Acacia rigens</u>	1

California - Lockeford PMC (contd.)

<u>Acacia rivalis</u>	1	<u>Agropyron imbricatum</u>	2
<u>Acacia rossei</u>	1	<u>Agropyron intermedium</u>	26
<u>Acacia rupicola</u>	1	<u>Agropyron intermedium</u> var. <u>intermedium</u>	1
<u>Acacia salicina</u>	1	<u>Agropyron intermedium</u> var. <u>trichophorum</u>	16
<u>Acacia saligna</u>	2	<u>Agropyron</u> x <u>littoralis</u>	1
<u>Acacia spectabilis</u>	1	<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1
<u>Acacia stenophylla</u>	1	<u>Agropyron pectinatum</u>	2
<u>Acacia suaveolens</u>	1	<u>Agropyron pectiniforme</u>	4
<u>Acacia subulata</u>	1	<u>Agropyron repens</u>	1
<u>Acacia tetragonophylla</u>	1	<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1
<u>Acacia uncinata</u>	1	<u>Agropyron scabriglume</u>	1
<u>Acacia verticillata</u>	1	<u>Agropyron sibiricum</u>	6
<u>Acacia victoriae</u>	1	<u>Agropyron smithii</u>	1
<u>Acacia viscidula</u>	1	<u>Agropyron spicatum</u>	2
<u>Acacia watsiana</u>	1	<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2
<u>Agropyron acutum</u>	1	<u>Agropyron stipifolium</u>	2
<u>Agropyron caninum</u>	5	<u>Agropyron striatum</u>	1
<u>Agropyron ciliare</u>	1	<u>Agropyron subsecundum</u>	1
<u>Agropyron ciliatiflorum</u>	1	<u>Agropyron tillicarense</u> x <u>A. libanoticum</u>	3
<u>Agropyron cristatum</u>	1	<u>Agropyron trachycaulum</u>	4
<u>Agropyron cristatum</u> x <u>desertorum</u>	1	<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1
<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2	<u>Agropyron ugamicum</u>	1
( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1	<u>Agropyron</u> sp.	3
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1	<u>Amorpha californica</u>	3
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1	<u>Astragalus arenarius</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>Elymus glaucus</u>	1	<u>Astragalus glycyphyllos</u>	2
<u>Agropyron dasystachyum</u> x <u>Sitanion</u> <u>hystrix</u>	2	<u>Brachiaria brizantha</u>	2
<u>Agropyron desertorum</u>	12	<u>Brachiaria decumbens</u>	2
<u>Agropyron donianum</u> x <u>A. subsecundum</u>	1	<u>Brachiaria emenii</u>	1
<u>Agropyron fibrosum</u>	1	<u>Brachiaria nigropedata</u>	1
<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u>	1	<u>Brachiaria rammes</u>	1
<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1	<u>Brachiaria ramosa</u>	2
		<u>Brachiaria ruziziensis</u>	2
		<u>Elymus agropoidides</u> var. <u>latiglume</u>	1



California - Lockeford PMC (contd.)

<u>Elymus angustus</u>	43	<u>Eucalyptus antipolitensis</u>	1
<u>Elymus aralensis</u>	1	<u>Eucalyptus approximans</u>	1
<u>Elymus arenarius</u>	6	<u>Eucalyptus astringens</u>	1
<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1	<u>Eucalyptus badjensis</u>	1
<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1	<u>Eucalyptus baeverlenii</u>	1
<u>Elymus canadensis</u> x <u>Agropyron subsecundum</u>	1	<u>Eucalyptus bancroftii</u>	1
( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>Agropyron dasystachyum</u> x <u>Agropyron</u> <u>caninum</u> )	4	<u>Eucalyptus banksii</u>	1
<u>Elymus cinereus</u>	1	<u>Eucalyptus baxteri</u>	1
<u>Elymus condensatus</u>	1	<u>Eucalyptus benthami</u> var. <u>dorrigoensis</u>	1
<u>Elymus curvatus</u>	1	<u>Eucalyptus beyeri</u>	1
<u>Elymus dahuricus</u>	3	<u>Eucalyptus blakelyi</u>	1
<u>Elymus erianthus</u>	1	<u>Eucalyptus blakelyi</u> var. <u>blakelyi</u>	1
<u>Elymus glaucus</u>	2	<u>Eucalyptus blaxlandii</u>	1
<u>Elymus giganteus</u>	2	<u>Eucalyptus bosistoana</u>	1
<u>Elymus interruptus</u>	1	<u>Eucalyptus botryoides</u>	3
<u>Elymus karataviensis</u>	2	<u>Eucalyptus brachycalyx</u>	1
<u>Elymus multicaulis</u>	1	<u>Eucalyptus brachycarya</u>	1
<u>Elymus paboanus</u>	1	<u>Eucalyptus brockwayi</u>	1
<u>Elymus patagonicus</u>	3	<u>Eucalyptus buprestium</u>	1
<u>Elymus salinas</u>	1	<u>Eucalyptus burracoppinensis</u>	1
<u>Elymus sibiricus</u>	8	<u>Eucalyptus caesia</u>	1
<u>Elymus virginicus</u>	3	<u>Eucalyptus caliginosa</u>	1
<u>Elymus wiegardii</u>	1	<u>Eucalyptus calophylla</u>	1
<u>Elymus sp.</u>	1	<u>Eucalyptus camaldulensis</u>	3
<u>Eucalyptus accendens</u>	1	<u>Eucalyptus cambageana</u>	1
<u>Eucalyptus albida</u>	1	<u>Eucalyptus campaspe</u>	1
<u>Eucalyptus alpina</u>	1	<u>Eucalyptus camphora</u>	1
<u>Eucalyptus amphifolia</u> var. <u>amphifolia</u>	1	<u>Eucalyptus capitellata</u>	1
<u>Eucalyptus amygdalina</u>	1	<u>Eucalyptus cephalocarpa</u>	1
<u>Eucalyptus andrewsii</u>	1	<u>Eucalyptus cinerea</u>	1
<u>Eucalyptus andrewsii</u> ssp. <u>campanulata</u>	1	<u>Eucalyptus cladocalyx</u>	1
<u>Eucalyptus angulosa</u>	1	<u>Eucalyptus clelandii</u>	1
<u>Eucalyptus annulata</u>	1	<u>Eucalyptus cloeziana</u>	1
		<u>Eucalyptus cheorifolia</u>	1

California - Lockeford PMC (contd.)

<u>Eucalyptus</u> <u>coccifera</u>	1	<u>Eucalyptus</u> <u>fastigata</u>	1
<u>Eucalyptus</u> <u>concinna</u>	1	<u>Eucalyptus</u> <u>fibrosa</u>	1
<u>Eucalyptus</u> <u>conglobulata</u>	1	<u>Eucalyptus</u> <u>fibrosa</u> ssp. <u>nubila</u>	1
<u>Eucalyptus</u> <u>cordata</u>	1	<u>Eucalyptus</u> <u>ficifolia</u>	1
<u>Eucalyptus</u> <u>cornuta</u>	1	<u>Eucalyptus</u> <u>foecunda</u>	1
<u>Eucalyptus</u> <u>crebra</u>	2	<u>Eucalyptus</u> <u>gittinsii</u>	2
<u>Eucalyptus</u> <u>crucis</u>	1	<u>Eucalyptus</u> <u>globulus</u>	3
<u>Eucalyptus</u> <u>cylindriflora</u>	1	<u>Eucalyptus</u> <u>globulus</u> ssp. <u>bicostata</u>	1
<u>Eucalyptus</u> <u>cylindrocarda</u>	1	<u>Eucalyptus</u> <u>gomphocephala</u>	1
<u>Eucalyptus</u> <u>dalrympleana</u>	2	<u>Eucalyptus</u> <u>gongylocarda</u>	1
<u>Eucalyptus</u> <u>daenei</u>	1	<u>Eucalyptus</u> <u>goniantha</u>	1
<u>Eucalyptus</u> <u>decipiens</u>	1	<u>Eucalyptus</u> <u>goniocalyx</u>	2
<u>Eucalyptus</u> <u>delegatensis</u>	1	<u>Eucalyptus</u> <u>gracilis</u>	2
<u>Eucalyptus</u> <u>diptera</u>	1	<u>Eucalyptus</u> <u>grandis</u>	1
<u>Eucalyptus</u> <u>divens</u>	1	<u>Eucalyptus</u> <u>griffithsii</u>	1
<u>Eucalyptus</u> <u>diversicolor</u>	1	<u>Eucalyptus</u> <u>grossa</u>	1
<u>Eucalyptus</u> <u>diversifolia</u>	1	<u>Eucalyptus</u> <u>gunnii</u>	1
<u>Eucalyptus</u> <u>deratoxylon</u>	1	<u>Eucalyptis</u> <u>huberiana</u>	1
<u>Eucalyptus</u> <u>drummondii</u>	1	<u>Eucalyptus</u> <u>incrassata</u>	2
<u>Eucalyptus</u> <u>dumos<del>a</del></u>	2	<u>Eucalyptus</u> <u>intermedia</u>	1
<u>Eucalyptus</u> <u>dungarrensii</u>	1	<u>Eucalyptus</u> <u>intermixta</u>	1
<u>Eucalyptus</u> <u>dunnii</u>	1	<u>Eucalyptus</u> <u>johnsonii</u>	1
<u>Eucalyptus</u> <u>dwyeri</u>	1	<u>Eucalyptus</u> <u>kartzoffiana</u>	1
<u>Eucalyptus</u> <u>ebbanoensis</u>	1	<u>Eucalyptus</u> <u>kitsonia</u>	1
<u>Eucalyptus</u> <u>elata</u>	1	<u>Eucalyptus</u> <u>kondininensis</u>	1
<u>Eucalyptus</u> <u>eremicola</u>	1	<u>Eucalyptus</u> <u>kruseana</u>	1
<u>Eucalyptus</u> <u>eremophila</u>	1	<u>Eucalyptus</u> <u>largiflorens</u>	2
<u>Eucalyptus</u> <u>erythrocorys</u>	1	<u>Eucalyptus</u> <u>leptophleba</u>	1
<u>Eucalyptus</u> <u>erythronema</u>	1	<u>Eucalyptus</u> <u>leptopoda</u>	1
<u>Eucalyptus</u> <u>erythronema</u> var. <u>marginata</u>	1	<u>Eucalyptus</u> <u>lesouefii</u>	1
<u>Eucalyptus</u> <u>eugenioides</u>	1	<u>Eucalyptus</u> <u>luehmanniana</u>	1
<u>Eucalyptus</u> <u>exilis</u>	1	<u>Eucalyptus</u> <u>ligulata</u>	1
<u>Eucalyptus</u> <u>exserta</u>	1	<u>Eucalyptus</u> <u>linearis</u>	1
<u>Eucalyptus</u> <u>falcata</u>	1	<u>Eucalyptus</u> <u>lirata</u>	1

California - Lockeford PMC (contd.)

<u>Eucalyptus</u> <u>loxophleba</u>	1	<u>Eucalyptus</u> <u>ovata</u>	1
<u>Eucalyptus</u> <u>macrandra</u>	1	<u>Eucalyptus</u> <u>ovularis</u>	1
<u>Eucalyptus</u> <u>macrandra</u> ssp. <u>cannonii</u>	1	<u>Eucalyptus</u> <u>oxymitra</u>	1
<u>Eucalyptus</u> <u>macrandra</u> ssp. <u>macrorhyncha</u>	1	<u>Eucalyptus</u> <u>pachyloma</u>	1
<u>Eucalyptus</u> <u>macrorhyncha</u> ssp. <u>sannonii</u>	1	<u>Eucalyptus</u> <u>pachyphylla</u>	1
<u>Eucalyptus</u> <u>maculata</u>	2	<u>Eucalyptus</u> <u>paniculata</u>	1
<u>Eucalyptus</u> <u>maidenii</u>	2	<u>Eucalyptus</u> <u>parramattensis</u>	1
<u>Eucalyptus</u> <u>major</u>	1	<u>Eucalyptus</u> <u>parvifolia</u>	1
<u>Eucalyptus</u> <u>mannifera</u> ssp. <u>gullickii</u>	1	<u>Eucalyptus</u> <u>patens</u>	1
<u>Eucalyptus</u> <u>mannifera</u> ssp. <u>maculosa</u>	1	<u>Eucalyptus</u> <u>pauciflora</u>	2
<u>Eucalyptus</u> <u>mannifera</u> ssp. <u>mannifera</u>	1	<u>Eucalyptus</u> <u>pauciflora</u> ssp. <u>debeuzevillei</u>	1
<u>Eucalyptus</u> <u>mannifera</u> ssp. <u>praecox</u>	1	<u>Eucalyptus</u> <u>pauciflora</u> ssp. <u>hiphorphila</u>	1
<u>Eucalyptus</u> <u>marginata</u>	1	<u>Eucalyptus</u> <u>pauciflora</u> ssp. <u>niphophila</u>	1
<u>Eucalyptus</u> <u>megacarpa</u>	2	<u>Eucalyptus</u> <u>peltata</u> ssp. <u>leichhardtii</u>	1
<u>Eucalyptus</u> <u>melliodora</u>	1	<u>Eucalyptus</u> <u>perriniana</u>	1
<u>Eucalyptus</u> <u>microcarpa</u>	1	<u>Eucalyptus</u> <u>phaeotricha</u>	1
<u>Eucalyptus</u> <u>moluccana</u>	1	<u>Eucalyptus</u> <u>phoenicea</u>	1
<u>Eucalyptus</u> <u>morrisii</u>	1	<u>Eucalyptus</u> <u>pileata</u>	2
<u>Eucalyptus</u> <u>muellerana</u>	1	<u>Eucalyptus</u> <u>pinularis</u>	1
<u>Eucalyptus</u> <u>nesophila</u>	1	<u>Eucalyptus</u> <u>planchoniana</u>	1
<u>Eucalyptus</u> <u>nitans</u>	1	<u>Eucalyptus</u> <u>platycorys</u>	1
<u>Eucalyptus</u> <u>nitida</u>	1	<u>Eucalyptus</u> <u>platypus</u> var. <u>heterophylla</u>	1
<u>Eucalyptus</u> <u>normatonensis</u>	1	<u>Eucalyptus</u> <u>platypus</u> var. <u>platypus</u>	1
<u>Eucalyptus</u> <u>notabilis</u>	1	<u>Eucalyptus</u> <u>plennissima</u>	1
<u>Eucalyptus</u> <u>nutans</u>	1	<u>Eucalyptus</u> <u>polycarpa</u>	1
<u>Eucalyptus</u> <u>obliqua</u>	1	<u>Eucalyptus</u> <u>populnea</u>	1
<u>Eucalyptus</u> <u>obtusifolia</u>	1	<u>Eucalyptus</u> <u>preissiana</u>	1
<u>Eucalyptus</u> <u>occidentalis</u>	1	<u>Eucalyptus</u> <u>propinqua</u>	1
<u>Eucalyptus</u> <u>odorata</u>	1	<u>Eucalyptus</u> <u>pumila</u>	1
<u>Eucalyptis</u> <u>oldfieldii</u>	1	<u>Eucalyptus</u> <u>punctata</u>	2
<u>Eucalyptus</u> <u>oleosa</u>	1	<u>Eucalyptus</u> <u>pyrocarpa</u>	1
<u>Eucalyptus</u> <u>oligantha</u>	1	<u>Eucalyptus</u> <u>quadrangulata</u>	1
<u>Eucalyptus</u> <u>oraria</u>	1	<u>Eucalyptus</u> <u>radiata</u> ssp. <u>robertsonii</u>	1
<u>Eucalyptus</u> <u>oreades</u>	1	<u>Eucalyptus</u> <u>redunca</u>	2

California - Lockeford PMC (contd.)

<u>Eucalyptus regnans</u>	1	<u>Eucalyptus wandoo</u>	1
<u>Eucalyptus rigidula</u>	1	<u>Eucalyptus woollsiana</u>	1
<u>Eucalyptus robusta</u>	2	<u>Eucalyptus yalataensis</u>	
<u>Eucalyptus rossii</u>	1	<u>Eucalyptus youmanii</u>	1
<u>Eucalyptus rubida</u>	1	<u>Eucalyptus sp.</u>	3
<u>Eucalyptus rudis</u>	1	<u>Festuca sulcata</u>	5
<u>Eucalyptus saligna</u>	1	<u>Juniperus cedrus</u>	1
<u>Eucalyptus salmonophloia</u>	1	<u>Juniperus chinensis</u>	4
<u>Eucalyptus salubris</u>	1	<u>Juniperus communis</u>	10
<u>Eucalyptus sclerophylla</u>	1	<u>Juniperus communis ssp. alpina</u>	1
<u>Eucalyptus sepulcralis</u>	1	<u>Juniperus communis ssp. nana</u>	1
<u>Eucalyptus siderophloia</u>	1	<u>Juniperus horizontalis</u>	1
<u>Eucalyptus sideroxylon</u>	2	<u>Juniperus oxycedrus</u>	4
<u>Eucalyptus smithii</u>	1	<u>Juniperus oxycedrus ssp. macrocarpa</u>	1
<u>Eucalyptus socialis</u>	1	<u>Juniperus phoenicea</u>	7
<u>Eucalyptus spathulata ssp. grandiflora</u>	1	<u>Juniperus pseudosabina</u>	1
<u>Eucalyptus staeri</u>	1	<u>Juniperus sabina</u>	5
<u>Eucalyptus stellulata</u>	1	<u>Juniperus scopulorum</u>	2
<u>Eucalyptus stenostoma</u>	1	<u>Juniperus sibirica</u>	2
<u>Eucalyptus stowardii</u>	1	<u>Juniperus virginiana</u>	8
<u>Eucalyptus tenuifames</u>	1	<u>Juniperus virginiana f. pyramidalis</u>	1
<u>Eucalyptus tenuipes</u>	1	<u>Kochia prostrata</u>	1
<u>Eucalyptus tereticornis</u>	1	<u>Lolium perenne</u>	14
<u>Eucalyptus tessellaris</u>	1	<u>Paspalum dilatatum</u>	2
<u>Eucalyptus tetragona</u>	1	<u>Paspalum prostratum</u>	1
<u>Eucalyptus tetraptera</u>	1	<u>Paspalum scrobiculatum</u>	1
<u>Eucalyptus todtiana</u>	1	<u>Paspalum stoloniferum</u>	2
<u>Eucalyptus torquata</u>	1	<u>Pinus armandii</u>	1
<u>Eucalyptus transcontinentalis</u>	1	<u>Pinus banksiana</u>	5
<u>Eucalyptus triflora</u>	1	<u>Pinus brutia</u>	1
<u>Eucalyptus trivalvis</u>	1	<u>Pinus canariensis</u>	4
<u>Eucalyptus umbra</u>	1	<u>Pinus cembra</u>	6
<u>Eucalyptus uncinata</u>	1	<u>Pinus clausa</u>	1
<u>Eucalyptus viminalis</u>	3	<u>Pinus contorta var. latifolia</u>	1



California - Lockeford PMC (contd.)

<u>Pinus densiflora</u>	1	( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1
<u>Pinus echinata</u>	8		
<u>Pinus elliotii</u>	8	( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1
<u>Pinus excelsa</u>	1	( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1
<u>Pinus flexilis</u>	1		
<u>Pinus halepensis</u>	4	( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1
<u>Pinus koraliensis</u>	1	( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>E. glaucus</u>	1
<u>Pinus lambertiana</u>	2		
<u>Pinus monticola</u>	2	<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u>	2
<u>Pinus mugo</u>	1	<u>Agropyron donianum</u> x <u>A. subsecundum</u>	1
<u>Pinus nigra</u>	4	<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u>	1
<u>Pinus oocarpa</u>	1	<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1
<u>Pinus pallasiana</u>	1	<u>Agropyron inerme</u>	2
<u>Pinus palustris</u>	6	<u>Agropyron intermedium</u>	25
<u>Pinus parvifolia</u>	2	<u>Agropyron intermedium</u> var. <u>trichophorum</u>	15
<u>Pinus peuce</u>	5	<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1
<u>Pinus pinaster</u>	4	<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1
<u>Pinus pinea</u>	8	<u>Agropyron riparium</u>	1
<u>Pinus ponderosa</u>	4	<u>Agropyron smithii</u>	4
<u>Pinus pumila</u>	1	<u>Agropyron spicatum</u>	1
<u>Pinus sabiniana</u>	2	<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2
<u>Pinus sosnovskyi</u>	1	<u>Agropyron tilicarense</u> x <u>A. libanoticum</u>	3
<u>Pinus strobus</u>	4	<u>Agropyron trachycaulum</u>	6
<u>Pinus sylvestris</u>	4	<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1
<u>Pinus taeda</u>	10	<u>Agropyron alba</u>	3
<u>Pinus thunbergiana</u>	2	<u>Agrostis gigantea</u>	9
<u>Pinus uncinata</u>	1	<u>Amelanchier alnifolia</u>	2
<u>Pinus virginiana</u>	3	<u>Artemisia ludoviciana</u>	1
<u>Pinus wallichiana</u>	2	<u>Aster adscendens</u>	1
		<u>Astragalus armendacys</u>	1
		<u>Astragalus cicer</u>	73
		<u>Astragalus mexicanus</u>	1
		<u>Astragalus stipulatus</u>	1
		<u>Atriplex canescens</u>	1
		<u>Bouteloua gracilis</u>	5
Colorado - Meeker Environmental Plant Center			
<u>Agropyron cristatum</u>	4		
<u>Agropyron cristatum</u> x <u>desertorum</u>	1		
<u>Agropyron dasystachyum</u>	2		
<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2		



Colorado - Meeker Environmental Plant Center (contd.)

<u>Bromus biebersteinii</u>	2	<u>Hedysarum cyprium</u>	1
<u>Bromus carinatus</u>	12	<u>Hedysarum grandiflorum</u>	1
<u>Bromus inermis</u>	27	<u>Hedysarum hedysaroides</u>	2
<u>Bromus marginatus</u>	2	<u>Hedysarum humile</u>	2
<u>Buchloe dactyloides</u>	2	<u>Hedysarum varium</u>	1
<u>Cercocarpus ledifolius</u> var. <u>hypoleucus</u>	1	<u>Hedysarum vicioides</u>	1
<u>Cynodon dactylon</u>	5	<u>Hedysarum</u> sp.	8
<u>Cynodon dactylon</u> var. <u>borinquen</u>	1	<u>Hilaria jamesii</u>	2
<u>Dactylis glomerata</u>	38	<u>Holodiscus dumosus</u>	1
<u>Dactylis glomerata</u> ssp. <u>aschersoniana</u>	3	<u>Koeleria cristata</u>	1
<u>Dactylis glomerata</u> ssp. <u>himalayensis</u>	1	<u>Lathyrus tuberosa</u>	1
<u>Dactylis glomerata</u> ssp. <u>hispanica</u>	1	<u>Lolium perenne</u>	168
<u>Dactylis glomerata</u> ssp. <u>parthiana</u>	1	<u>Muhlenbergia montana</u>	2
<u>Dactylis glomerata</u> ssp. <u>santai</u>	1	<u>Muhlenbergia wrightii</u>	2
<u>Dactylis glomerata</u> ssp. <u>woronowii</u>	2	<u>Oryzopsis hymenoides</u>	6
<u>Danthonia californica</u>	1	<u>Phleum alpinum</u>	50
<u>Danthonia spicata</u>	3	<u>Phleum phleoides</u>	1
<u>Deschampsia cespitosa</u>	26	<u>Phleum pratense</u>	50
<u>Deschampsia cespitosa</u> var. <u>pallida</u>	1	<u>Phleum pratense</u> var. <u>escimo</u>	1
<u>Elymus angustus</u>	41	<u>Phleum pratense</u> var. <u>nodosum</u>	1
<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1	<u>Poa alpigena</u>	1
<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1	<u>Poa alpina</u>	6
<u>Elymus canadensis</u> x <u>Agropyron subsecundum</u>	1	<u>Poa ampla</u>	1
( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> )	4	<u>Poa compressa</u>	4
<u>Elymus cinereus</u>	3	<u>Potentilla fruticosa</u>	7
<u>Elymus salinas</u>	1	<u>Psathyrostachys juncea</u>	8
<u>Elymus triticoides</u>	2	<u>Puccinellia distans</u>	6
<u>Festuca arizonica</u>	1	<u>Purshia tridentata</u>	2
<u>Festuca sulcata</u>	5	<u>Ribes americanum</u>	2
<u>Hedysarum alpinum</u> v. <u>americanum</u>	1	<u>Ribes aureum</u>	2
<u>Hedysarum argentum</u>	1	<u>Sanguisorba minor</u>	44
<u>Hedysarum caucasicum</u>	1	<u>Sanguisorba minor</u> f. <u>depressa</u>	1
<u>Hedysarum coronarium</u>	16	<u>Sanguisorba minor</u> ssp. <u>magnoli</u>	1
		<u>Sanguisorba minor</u> ssp. <u>muricata</u>	2

Colorado - Meeker Environmental Plant Center (contd.)

<u>Saponaria officinalis</u>	2
<u>Sporobolus airoides</u>	6
<u>Sporobolus cryptandrum</u>	1
<u>Stipa viridula</u>	6
<u>Symphoricarpos albus</u>	7
<u>Symphoricarpos albus</u> var. <u>laevigatus</u>	3
<u>Symphoricarpos occidentalis</u>	1
<u>Symphoricarpos oreophilus</u>	2
<u>Trifolium repens</u>	30
<u>Trifolium repens</u> f. <u>atropurpureum</u>	1
<u>Trifolium repens latum</u>	1
<u>Trisetum spicatum</u>	3
<u>Vaccinium scoparium</u>	1
<u>Vicia cracca</u>	3
<u>Vicia tenuifolia</u>	1

Florida - Brooksville Plant Materials Center

<u>Paspalum vaginatum</u>	1
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Georgia - Americus Plant Materials Center

<u>Chasmanthium latifolium</u>	7
<u>Elymus curvatus</u>	1
<u>Leersia oryzoides</u>	1

Hawaii - Hoolehua Plant Materials Center

<u>Aeschynomene americana</u>	1
<u>Aeschynomene falcata</u>	1
<u>Biserrula pelecinus</u>	2
<u>Brachiaria decumbens</u>	1
<u>Calopogonium muconoides</u>	1
<u>Centrosema pubescens</u>	7
<u>Desmodium intortum</u>	2
<u>Desmodium uncinatum</u>	1
<u>Dolichos bicolor</u>	1
<u>Dolichos cembra</u>	1
<u>Dolichos lablab</u>	9
<u>Dolichos leucomelas</u>	1

<u>Dolichos ornatus</u>	4
<u>Dolichos zebra</u>	2
<u>Elaeagnus angustifolia</u>	1
<u>Indigofera neglecta</u>	1
<u>Indigofera spicata</u>	1
<u>Ischaemum indicum</u> var. <u>longipilum</u>	1
<u>Lonicera korolkowii</u>	1
<u>Lotononsis bainesii</u>	1
<u>Lotus pedunculatus</u>	1
<u>Lotus tenuis</u>	1
<u>Lotus uliginosus</u>	7
<u>Macroptilium atropurpureum</u>	7
<u>Medicago polymorpha</u>	16
<u>Salvia sonomensis</u>	4
<u>Setaria sphacelata</u>	3
<u>Stylosanthes humilis</u>	1
<u>Trifolium repens</u>	1
<u>Vicia villosa</u>	1

Idaho - Aberdeen Plant Materials Center

<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2
( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>E. glaucus</u>	1
<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u>	2
<u>Agropyron donianum</u> x <u>A. subsecundum</u>	1
<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u>	1
<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1
<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1
<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1
<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2
<u>Agropyron tillicarense</u> x <u>A. libanoticum</u>	3

Idaho - Aberdeen Plant Materials Center

<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1
<u>Agropyron</u> sp.	1
<u>Elymus angustus</u>	41
<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1
<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1
<u>Elymus canadensis</u> x <u>Agropyron subsecundum</u>	1
( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> )	4
<u>Lotus corniculatus</u>	2

Kansas - Manhattan Plant Materials Center

<u>Amygdalus nana</u>	1
<u>Biota orientalis</u>	2
<u>Biota orientalis</u> f. <u>beverleyensis</u>	1
<u>Ceanothus americanus</u>	7
<u>Ceanothus arboreus</u>	1
<u>Ceanothus</u> x <u>delilianus</u>	2
<u>Ceanothus fendleri</u>	1
<u>Ceanothus griseus</u>	1
<u>Ceanothus pallidus</u>	1
<u>Ceanothus spinosus</u>	1
<u>Ceanothus thyrsiflorus</u> var. <u>repens</u>	1
<u>Ceanothus</u> x <u>Topaz</u>	1
<u>Ceanothus velutinus</u> var. <u>velutinus</u>	1
<u>Ceanothus</u> sp.	2
<u>Celtis australis</u>	6
<u>Celtis caucasica</u>	2
<u>Celtis jessoensis</u>	1
<u>Celtis occidentalis</u>	11
<u>Celtis occidentalis</u> var. <u>cordata</u>	1
<u>Celtis pumila</u>	2
<u>Celtis sinensis</u>	1
<u>Celtis sinensis</u> var. <u>japonica</u>	1
<u>Celtis yunnanensis</u>	1
<u>Echinacea angustifolia</u>	1

<u>Elaeagnus angustifolia</u>	2
<u>Padus serotina</u>	2
<u>Padus virginiana</u>	1
<u>Penstemon alpinus</u>	1
<u>Penstemon azureus</u>	1
<u>Penstemon campanulatus</u>	1
<u>Penstemon cardinalis</u>	1
<u>Penstemon confertus</u>	1
<u>Penstemon eatoni</u>	1
<u>Penstemon fendleri</u>	1
<u>Penstemon grandiflorus</u>	1
<u>Penstemon menziesii</u> var. <u>scouleri</u>	1
<u>Penstemon newberryi</u>	1
<u>Penstemon parryi</u>	1
<u>Penstemon scouleri</u>	1
<u>Platycladus orientalis</u>	2
<u>Prunus depressa</u>	1
<u>Prunus serotina</u>	3
<u>Prunus virginiana</u>	3
<u>Rhus aromatica</u>	2
<u>Shepherdia argentea</u>	1
<u>Silphium laciniatum</u>	4
<u>Thuja orientalis</u>	8

Kentucky - Quicksand Plant Materials Center

<u>Quercus acutissima</u>	1
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Maryland - College Park State Office  
State Resource Conservationist

<u>Phalaris arundinacea</u>	5
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Michigan - Rose Lake Plant Materials Center

<u>Agropyron elongatum</u>	5
<u>Aster novae-angliae</u>	1
<u>Calamovilfa longifolia</u>	1
<u>Gilia rubra</u>	1
<u>Monarda fistulosa</u>	3
<u>Panicum virgatum</u>	1

Montana - Bridger Plant Materials Center

<u>Achillea filipendulina</u>	2	<u>Aster conspicuus</u>	1
<u>Achillea millefolium</u>	13	<u>Aster cordifolius</u>	1
<u>Achillea ptarmica</u>	2	<u>Aster diplostephoides</u>	1
<u>Agropyron albicans</u> f. <u>griffithsii</u>	1	<u>Aster dumosus</u>	3
<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2	<u>Aster ericoides</u>	3
( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1	<u>Aster farreri</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1	<u>Aster fremontii</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1	<u>Aster fruticosus</u>	2
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1	<u>Aster furcatus</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>E. glaucus</u>	1	<u>Aster garibaldii</u>	1
<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u>	2	<u>Aster himalaicus</u>	1
<u>Agropyron donianum</u> x <u>A. subsecundum</u>	1	<u>Aster hybridus</u>	2
<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u>	1	<u>Aster ibericus</u>	1
<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1	<u>Aster lanceolatus</u>	1
<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1	<u>Aster linosyris</u>	7
<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1	<u>Aster maackii</u>	2
<u>Agropyron smithii</u>	1	<u>Aster macrophylla</u>	2
<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2	<u>Aster mongolicus</u>	1
<u>Agropyron tillicarense</u> x <u>A. libanoticum</u>	3	<u>Aster novae-angliae</u>	9
<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1	<u>Aster novi-belgii</u>	3
<u>Agropyron sp.</u>	1	<u>Aster pansus</u>	2
<u>Antennaria dioica</u>	1	<u>Aster pappei</u>	1
<u>Artemisia vulgaris</u>	23	<u>Aster ptarmicoides</u>	1
<u>Aster alpinus</u>	17	<u>Aster punctatus</u>	1
<u>Aster alpinus</u> var. <u>albus</u>	3	<u>Aster pyrenaicus</u>	4
<u>Aster alpinus</u> var. <u>alpinus</u>	1	<u>Aster pyrenaicus</u>	1
<u>Aster alpinus</u> var. <u>dolomiticus</u>	1	<u>Aster roundifolius</u>	2
<u>Aster alpinus</u> var. <u>speciosus</u>	1	<u>Aster scaber</u>	2
<u>Aster alpinus</u> var. <u>wolfii</u>	1	<u>Aster sedifolius</u>	1
<u>Aster amelloides</u>	1	<u>Aster sibiricus</u>	4
<u>Aster amellus</u>	5	<u>Aster sibiricus</u> var. <u>subintegerrimus</u>	1
<u>Aster brachyactis</u>	1	<u>Aster squamatus</u>	1
<u>Aster chilensis</u>	1	<u>Aster subcaeruleus</u>	1
		<u>Aster tataricus</u>	1



Montana - Bridger Plant Materials Center (contd.)

<u>Aster thomsonii</u>	1	<u>Erigeron bellidifolius</u>	1
<u>Aster thomsonii</u> var. <u>nana</u>	1	<u>Erigeron bonariensis</u>	1
<u>Aster tibeticus</u>	3	<u>Erigeron borealis</u>	6
<u>Aster tibeticus</u> var. <u>albus</u>	1	<u>Erigeron candidus</u>	1
<u>Aster tongolensis</u>	2	<u>Erigeron compositus</u>	6
<u>Aster tradescantii</u>	1	<u>Erigeron coulteri</u>	1
<u>Aster tripolium</u>	9	<u>Erigeron crispum</u>	2
<u>Aster tripolium</u> var. <u>discoldeus</u>	1	<u>Erigeron divergens</u>	1
<u>Aster uliginosus</u>	1	<u>Erigeron eriocephalus</u>	1
<u>Aster umbellatus</u>	2	<u>Erigeron flagellaris</u>	2
<u>Aster yunnanensis</u>	1	<u>Erigeron gaudinii</u>	1
<u>Bouteloua gracilis</u>	1	<u>Erigeron giganteum</u>	1
<u>Buchloe dactyloides</u>	2	<u>Erigeron glabellus</u>	5
<u>Castilleja miniata</u>	1	<u>Erigeron glaucus</u>	4
<u>Castilleja unalaschensis</u>	1	<u>Erigeron grandiflorus</u>	1
<u>Conyza canadensis</u>	9	<u>Erigeron grandiflorus</u> var. <u>elator</u>	1
<u>Elymus angustus</u>	41	<u>Erigeron howellii</u>	1
<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1	<u>Erigeron humilis</u>	3
<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1	<u>Erigeron karvinskianus</u>	1
<u>Elymus canadensis</u> x <u>Agropyron subsecundum</u>	1	<u>Erigeron leiomerus</u>	1
( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>A. dasystachyum</u> x <u>A. caninum</u> )	4	<u>Erigeron macranthus</u>	1
<u>Erigeron acer</u>	6	<u>Erigeron mucronatus</u>	2
<u>Erigeron acer</u> ssp. <u>acer</u>	1	<u>Erigeron naudini</u>	2
<u>Erigeron acer</u> ssp. <u>droebachensis</u>	1	<u>Erigeron oreganus</u>	1
<u>Erigeron acer</u> ssp. <u>politus</u>	1	<u>Erigeron orientalis</u>	1
<u>Erigeron acris</u>	2	<u>Erigeron peregrinus</u> ssp. <u>callianthemus</u>	1
<u>Erigeron acris</u> ssp. <u>politus</u>	1	<u>Erigeron polymorphus</u>	1
<u>Erigeron alpinus</u>	5	<u>Erigeron pulchellus</u>	2
<u>Erigeron alpinus</u> var. <u>albus</u>	1	<u>Erigeron radicans</u>	1
<u>Erigeron annuus</u>	4	<u>Erigeron roylei</u>	1
<u>Erigeron annuus</u> ssp. <u>strigosus</u>	1	<u>Erigeron speciosus</u>	12
<u>Erigeron atticus</u>	2	<u>Erigeron speciosus</u> var. <u>macranthus</u>	1
<u>Erigeron aurantiacus</u>	6	<u>Erigeron subtrinervis</u> var. <u>conspicuus</u>	1
		<u>Erigeron thunbergii</u> var. <u>glabratus</u>	1



Montana - Bridger Plant Materials Center (contd.)

<u>Erigeron unalaschensis</u>	1	<u>Penstemon newberryi</u>	1
<u>Erigeron uniflorus</u>	4	<u>Penstemon ovatus</u>	1
<u>Erigeron venustus</u>	1	<u>Penstemon palmeri</u>	1
<u>Erigeron villarsii</u>	2	<u>Penstemon pinifolius</u>	1
<u>Festuca sulcata</u>	5	<u>Penstemon procerus</u>	2
<u>Hedysarum boreale</u> ssp. <u>mackenzii</u>	1	<u>Penstemon procerus</u> var. <u>procerus</u>	1
<u>Lomatium dissectum</u> var. <u>multifidum</u>	1	<u>Penstemon procerus</u> var. <u>tolmiei</u>	1
<u>Lomatium grayi</u>	1	<u>Penstemon richardsonii</u>	2
<u>Lomatium triternatum</u> ssp. <u>platycarpum</u>	1	<u>Penstemon roezlii</u>	1
<u>Penstemon alpinus</u>	3	<u>Penstemon scouleri</u> var. <u>albus</u>	1
<u>Penstemon arizonicus</u>	1	<u>Penstemon serrulatus</u>	2
<u>Penstemon barbatus</u>	4	<u>Penstemon speciosus</u>	1
<u>Penstemon californicus</u>	1	<u>Penstemon stenopetalus</u>	1
<u>Penstemon calycosus</u>	2	<u>Penstemon ternatus</u>	1
<u>Penstemon campanulatus</u>	3	<u>Penstemon tolmiei</u>	1
<u>Penstemon campanulatus</u> var. <u>pulchellus</u>	1	<u>Penstemon tolmiei</u> var. <u>brachyanthus</u>	1
<u>Penstemon coboea</u>	1	<u>Penstemon truticosus</u>	1
<u>Penstemon confertus</u>	2	<u>Penstemon utahensis</u>	1
<u>Penstemon cyanthus</u>	1	<u>Penstemon venustus</u>	1
<u>Penstemon davidsonii</u>	1	<u>Penstemon</u> sp.	1
<u>Penstemon diffusus</u>	3	<u>Poa compressa</u>	17
<u>Penstemon digitalis</u>	2	<u>Stenactis speciosus</u>	1
<u>Penstemon diphyllus</u>	1	<u>Vicia cracca</u>	1
<u>Penstemon fruticosus</u> var. <u>scouleri</u>	1	<u>Vicia melanops</u>	1
<u>Penstemon gentianoides</u>	1	<u>Vicia sepium</u>	12
<u>Penstemon glaber</u>	1	<u>Vicia tenuifolia</u>	1
<u>Penstemon grandiflorus</u>	1	New Jersey - Cape May Plant Materials Center	
<u>Penstemon hallii</u>	1	<u>Calamagrostis arundinacea</u>	1
<u>Penstemon heterophyllus</u>	3	<u>Myrica pennsylvanica</u>	4
<u>Penstemon hirsutus</u>	3	<u>Phalaris aquatica</u>	8
<u>Penstemon hybridus</u>	1	<u>Solidago sempervirens</u>	1
<u>Penstemon laevigatus</u>	1	New Mexico - Los Lunas Plant Materials Center	
<u>Penstemon menziesii</u>	1	<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2
<u>Penstemon murrayanus</u>	1	( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1

## New Mexico - Los Lunas Plant Materials Center (contd.)

( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>Elymus glaucus</u>	1
<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u>	2
<u>Agropyron donianum</u> x <u>A. subsecundum</u>	1
<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u>	1
<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1
<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1
<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1
<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2
<u>Agropyron tillicarense</u> x <u>A. libanoticum</u>	3
<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1
<u>Agropyron</u> sp. •	1
<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1
<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1
( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>A. dasystachyum</u> x <u>A. caninum</u> )	4
<u>Festuca sulcata</u>	5
<u>Koeleria gracilis</u>	1
<u>Lathyrus tuberosa</u>	1
<u>Lotus caucasicus</u>	5
<u>Lotus corniculatus</u>	3
<u>Lotus</u> sp.	2
<u>Puccinellia distans</u>	1
<u>Purshia tridentata</u>	1
<u>Setaria macrastachya</u>	1
<u>Trifolium pratense</u>	8
<u>Trifolium repens</u>	2
<u>Vicia cracca</u>	3
<u>Vicia tenuifolia</u>	1

New York - Syracuse State Office  
Plant Materials Specialist

<u>Agrostis tenuis</u>	2
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## New York - Big Flats Plant Materials Center

<u>Agrostis gigantea</u>	4
<u>Agrostis stolonifera</u>	1
<u>Cephalanthus occidentalis</u>	2
<u>Ilex verticillata</u>	6
<u>Rosa palustris</u>	2
<u>Viburnum acerifolium</u>	6
<u>Viburnum alnifolium</u>	1
<u>Viburnum cassinoides</u>	2
<u>Viburnum dentatum</u>	8
<u>Viburnum dentatum</u> var. <u>scabrellum</u>	1
<u>Viburnum lantana</u>	18
<u>Viburnum lantana</u> f. <u>auro-variefatum</u>	1
<u>Viburnum lantana</u> var. <u>glabratum</u>	1
<u>Viburnum lentago</u>	8
<u>Viburnum prunifolium</u>	5
<u>Vicia americana</u>	2
<u>Vicia angustifolia</u>	6
<u>Vicia cracca</u>	22
<u>Vicia cracca</u> var. <u>grossheimii</u>	11
<u>Vicia sativa</u> ssp. <u>nigra</u>	38
<u>Vicia sepium</u>	11
<u>Vicia sepium</u> var. <u>montana</u>	1
<u>Vicia sepium</u> var. <u>sepium</u>	2

## Oregon - Corvallis Plant Materials Center

<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2
( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>E. glaucus</u>	1
<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u>	2
<u>Agropyron donianum</u> x <u>A. secundum</u>	1
<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1

Texas - Kingsville Plant Materials Center (contd.)

<u>Desmodium salicifolium</u>	1	<u>Indigofera schinzii</u>	2
<u>Desmodium sandwicense</u>	14	<u>Indigofera spicata</u>	10
<u>Desmodium scordiurus</u>	1	<u>Indigofera subulata</u>	5
<u>Desmodium tortuosum</u>	31	<u>Indigofera suffruticosa</u>	4
<u>Desmodium uncinatum</u>	5	<u>Indigofera teysmannii</u>	2
<u>Desmodium sp.</u>	8	<u>Indigofera tinctoria</u>	5
<u>Digitaria californica</u>	1	<u>Indigofera sp.</u>	6
<u>Eragrostis chloromelas</u>	1	<u>Leptochloa dubia</u>	2
<u>Eragrostis lehmanniana</u>	2	<u>Leptochloa fusca</u>	1
<u>Eragrostis superba</u>	2	<u>Leptochloa monostachya</u>	1
<u>Indigofera arrecta</u>	3	<u>Lespedeza cuneata</u>	31
<u>Indigofera circinella</u>	2	<u>Lespedeza virgata</u>	3
<u>Indigofera colutea</u>	1	<u>Kochia prostrata</u>	1
<u>Indigofera confusa</u>	1	<u>Oryzopsis coerulescens</u>	2
<u>Indigofera cordifolia</u>	1	<u>Oryzopsis holciformis</u>	1
<u>Indigofera cryptantha</u>	1	<u>Oryzopsis hymenoides</u>	10
<u>Indigofera echinata</u>	1	<u>Oryzopsis miliacea</u>	3
<u>Indigofera glandulosa</u>	1	<u>Panicum amurulum</u>	4
<u>Indigofera hirsuta</u>	14	<u>Panicum antidotale</u>	1
<u>Indigofera hochstetteri</u>	1	<u>Panicum coloratum</u>	2
<u>Indigofera lespedesoides</u>	1	<u>Panicum virgatum</u>	4
<u>Indigofera lindheimeriana</u>	1	<u>Pappophorum mucronulatum</u>	1
<u>Indigofera mucronata</u>	2	<u>Paspalum alcalinum</u>	1
<u>Indigofera neglecta</u>	1	<u>Paspalum commersonii</u>	1
<u>Indigofera parodiana</u>	1	<u>Paspalum conjugatum</u>	1
<u>Indigofera patens</u>	1	<u>Paspalum conspersum</u>	1
<u>Indigofera pilosa</u>	1	<u>Paspalum cromyrorhizon</u>	4
<u>Indigofera praticola</u>	1	<u>Paspalum dilatatum</u>	9
<u>Indigofera pruinosa</u>	1	<u>Paspalum distichum</u>	1
<u>Indigofera pseudotinctoria</u>	4	<u>Paspalum floridianum</u> var. <u>glabratum</u>	1
<u>Indigofera ramosa</u>	1	<u>Paspalum guenoarum</u>	3
<u>Indigofera rautanenii</u>	1	<u>Paspalum jurgensii</u>	1
<u>Indigofera retroflexa</u>	1	<u>Paspalum lividum</u>	1
<u>Indigofera schrimperi</u>	2	<u>Paspalum malacophyllum</u>	2



New York - Big Flats Plant Materials Center (contd.)

<u>Agropyron intermedium</u>	26	<u>Clitoria ternatea</u>	7
<u>Agropyron intermedium</u> var. <u>trichophorum</u>	15	<u>Desmanthus depressus</u>	2
<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1	<u>Desmanthus virgatus</u>	4
<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1	<u>Desmodium adscendens</u>	6
<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2	<u>Desmodium affine</u>	1
<u>Agropyron tillicarense</u> x <u>A. libanoticum</u>	3	<u>Desmodium aparines</u>	1
<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1	<u>Desmodium axillare</u>	2
<u>Agropyron</u> sp.	1	<u>Desmodium barbatum</u>	5
<u>Alnus sinuata</u>	2	<u>Desmodium campylocaulon</u>	1
<u>Amelanchier alnifolia</u>	3	<u>Desmodium canadense</u>	12
<u>Amelanchier florida</u>	1	<u>Desmodium canescens</u>	1
<u>Bromus carinatus</u>	10	<u>Desmodium canum</u>	6
<u>Danthonia californica</u>	1	<u>Desmodium cinerascens</u>	1
<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1	<u>Desmodium cinereum</u>	2
<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1	<u>Desmodium cuneatum</u>	2
<u>Elymus canadensis</u> x <u>Agropyron subsecundum</u>	1	<u>Desmodium discolor</u>	19
( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> )	4	<u>Desmodium distortum</u>	9
<u>Festuca occidentalis</u>	4	<u>Desmodium gangeticum</u>	2
<u>Festuca sulcata</u>	5	<u>Desmodium gyrans</u>	1
<u>Holodiscus discolor</u>	1	<u>Desmodium gyroides</u>	1
<u>Lathyrus latifolius</u>	12	<u>Desmodium hassleri</u>	1
<u>Lathyrus tuberosa</u>	1	<u>Desmodium heterocardum</u>	1
<u>Lotus corniculatus</u> var. <u>crassifolius</u>	1	<u>Desmodium hirtum</u>	1
<u>Trifolium ambiguum</u>	35	<u>Desmodium intortum</u>	17
<u>Vicia cracca</u>	3	<u>Desmodium lanceolatum</u>	1
Puerto Rico - San Juan State Office State Resource Conservationist		<u>Desmodium leiocardum</u>	1
		<u>Desmodium neomexicanum</u>	1
		<u>Desmodium nicaraguense</u>	3
<u>Pueraria lobata</u>	2	<u>Desmodium pabulare</u>	9
Texas - Kingsville Plant Materials Center		<u>Desmodium perplexum</u>	2
		<u>Desmodium polycardum</u>	1
		<u>Desmodium racemosum</u>	1
		<u>Desmodium resonii</u>	1
		<u>Desmodium rigidum</u>	2
<u>Bothriochloa ischaemum</u>	7		
<u>Bothriochloa curtipendala</u>	1		
<u>Cassia fasciculata</u>	3		
<u>Cassia mimosoides</u>	1		
<u>Centrosema virginianum</u>	7		

Texas - Kingsville Plant Materials Center (contd.)

<u>Paspalum nicorae</u>	15	( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. trachycaulum</u>	1
<u>Paspalum notatum</u>	23		
<u>Paspalum notatum</u> var. <u>latiflorum</u>	1	( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>E. glaucus</u>	1
<u>Paspalum paniculatum</u>	1	<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u>	2
<u>Paspalum paspaloides</u>	1	<u>Agropyron donianum</u> x <u>A. subsecundum</u>	1
<u>Paspalum plicatulum</u>	8	<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u>	1
<u>Paspalum pubiflorum</u> var. <u>glabrum</u>	1	<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u>	1
<u>Paspalum quaranticum</u>	1	<u>Agropyron libanoticum</u> x <u>A. caninum</u>	1
<u>Paspalum scrobiculatum</u>	8	<u>Agropyron repens</u> x <u>A. dasystachyum</u>	1
<u>Paspalum stoloniferum</u>	2	<u>Agropyron spicatum</u> x <u>A. dasystachyum</u>	2
<u>Paspalum tenellum</u>	1	<u>Agropyron tilicarense</u> x <u>A. libanoticum</u>	4
<u>Paspalum thunbergii</u>	1	<u>Agropyron trachycaulum</u> x <u>Sitanion hystrix</u>	1
<u>Paspalum umbrosum</u>	2	<u>Agropyron</u> sp.	1
<u>Paspalum urvillei</u>	3	<u>Amelanchier alnifolia</u>	2
<u>Paspalum vaginatum</u>	2	<u>Elymus canadensis</u> x <u>Agropyron caninum</u>	1
<u>Paspalum wettsteinii</u>	1	<u>Elymus canadensis</u> x <u>Agropyron spicatum</u>	1
Washington - Pullman Plant Materials Center		<u>Elymus canadensis</u> x <u>Agropyron subsecundum</u>	1
<u>Agropyron dasystachyum</u> x <u>A. caninum</u>	2	( <u>Elymus canadensis</u> x <u>Agropyron subsecundum</u> ) x ( <u>A. dasystachyum</u> x <u>A. caninum</u> )	4
( <u>Agropyron dasystachyum</u> x <u>A. caninum</u> ) x <u>A. dasystachyum</u>	1		
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u>	1		



APPENDIX VII

DOMESTIC DISTRIBUTION - SEED - OUTSIDE SCS



## Domestic Distribution - Seed - Outside SCS

This year 373 accessions were shipped to eleven domestic organizations researching a variety of topics from nitrogen fixation to germination test criteria.

<u>Organization</u>	<u>Species</u>	<u>Accessions</u>
Agricultural Research Service	<u>Trifolium ambiguum</u>	35
Appalachian Soil and Water Conservation Research Lab. Beckley, W. Va.	<u>Vicia cracca</u>	1
Agricultural Research Service	<u>Agropyron smithii</u>	1
Seed Standardization Lab.	<u>Agropyron trachycaulum</u>	1
Beltsville, MD	<u>Andropogon saccharoides</u>	1
	<u>Elymus virginicus</u>	1
	<u>Setaria macrostachya</u>	8
Agricultural Research Service	<u>Elymus arenarius</u>	1
Northern Great Plains Research Laboratory Mandan, N. Dak.	<u>Elymus sibiricus</u>	1
Clemson University	<u>Alnus rugosa</u>	1
Department of Forestry	<u>Casuarina stricta</u>	1
Clemson, S. C.	<u>Cercocarpus montanus</u>	1
	<u>Elaeagnus angustifolia</u>	1
	<u>Elaeagnus umbellata</u>	1
	<u>Hippophae rhamnoides</u>	1
	<u>Myrica cerifera</u>	1
	<u>Myrica cordifolia</u>	1
	<u>Myrica pennsylvanica</u>	1
University of Florida	<u>Brachiaria brizantha</u>	3
Gainesville, Fla.	<u>Brachiaria decumbens</u>	3
	<u>Brachiaria nigropedata</u>	1
	<u>Brachiaria ramosa</u>	3
	<u>Brachiaria ruziziensis</u>	2
	<u>Brachiaria xantholeuca</u>	1
University of Georgia	<u>Castanea alnifolia</u>	1
School of Forest Resources Athens, Ga.	<u>Castanea pumila</u>	1
Heller, Phyllis	<u>Atriplex canescens</u>	1
Howard Beach, New York	<u>Atriplex confertifolia</u>	21
	<u>Atriplex nuttalli</u>	3
	<u>Ceratoides lanata</u>	13

<u>Organization</u>	<u>Species</u>	<u>Accessions</u>
Laperche, Michael	<u>Arachis monticola</u>	1
	<u>Canavalia ensiformis</u>	1
	<u>Clitoria ternatea</u>	1
	<u>Hedysarum coronarium</u>	1
	<u>Indigofera tinctoria</u>	1
	<u>Lathyrus japonicus</u>	1
	<u>Lathyrus pratensis</u>	1
	<u>Lathyrus tuberosa</u>	1
	<u>Macrotyloma uniflorum</u>	1
	<u>Psoralea esculenta</u>	1
	<u>Tetragonolobus purpurens</u>	1
	<u>Vigna unguiculata</u>	1
Niagara University	<u>Panicum capillare</u>	1
Biology Department	<u>Puccinellia distans</u>	1
Niagara, New York		
Nitragin Company, Inc.	<u>Calopogonium caeruleum</u>	1
Research and Development		
Milwaukee, Wisc.		
PLENTY	<u>Lespedeza angustifoloides</u>	2
(world food organization)	<u>Lespedeza bicolor</u>	22
Summertown, Tenn.	<u>Lespedeza capitata</u>	80
	<u>Lespedeza cuneata</u>	47
	<u>Lespedeza cyrtobotrya</u>	14
	<u>Lespedeza daurica</u>	4
	<u>Lespedeza divaricata</u>	2
	<u>Lespedeza formosa</u>	1
	<u>Lespedeza hedysaroides</u>	2
	<u>Lespedeza inschanica</u>	2
	<u>Lespedeza intermixta</u>	2
	<u>Lespedeza japonica</u>	7
	<u>Lespedeza juncea</u>	1
	<u>Lespedeza latissima</u>	4
	<u>Lespedeza maximoviczii</u>	4
	<u>Lespedeza patentibicolor</u>	1
	<u>Lespedeza pilosa</u>	1
	<u>Lespedeza repens</u>	1
	<u>Lespedeza serpens</u>	1
	<u>Lespedeza stipulacea</u>	10
	<u>Lespedeza striata</u>	13
	<u>Lespedeza thunbergii</u>	11
	<u>Lespedeza tomentosa</u>	5
	<u>Lespedeza virgata</u>	8
	<u>Lespedeza sp.</u>	1
Potomac State College	<u>Dianthus steinbergii</u>	1
Keyser, W. Va.		

APPENDIX VIII  
DOMESTIC DISTRIBUTION - VEGETATIVE MATERIALS





### Domestic Distribution - Vegetative Material - Outside SCS

A total of 18,000 Spartina plants were grown and delivered to Virginia in support of site evaluation studies being done by the Virginia Shore Erosion Advisory Service and the Virginia Institute of Maritime Studies.

Virginia - Shore Erosion Advisory Service

C. Lee Hill, Chief Engineer

Gloucester

(Material delivered to planting sites along the Chesapeake Bay and the Potomac and Rappahannock Rivers)

<u>Spartina alterniflora</u>	11,000 potted plants
<u>Spartina patens</u> , PI-421237	2,220 potted plants
<u>Spartina patens</u> , PI-421262	2,400 potted plants
<u>Spartina patens</u> , PI-421290	2,400 potted plants

### Domestic Distribution - Vegetative Materials - SCS

A total of 10,300 Spartina plants and 200 hardwood cuttings were distributed: the Spartina to field evaluation plantings on the Atlantic coast, the cuttings to Washington.

New Jersey - Cape May Plant Materials Center

Cluster Belcher, Manager

(Material delivered to planting sites in Warsaw, VA; Chestertown, MD; Westhampton Beach, NY)

<u>Spartina patens</u> , PI-421237	992 potted plants
<u>Spartina patens</u> , PI-421238	864 potted plants
<u>Spartina patens</u> , PI-421239	864 potted plants
<u>Spartina patens</u> , PI-421250	864 potted plants
<u>Spartina patens</u> , PI-421262	864 potted plants
<u>Spartina patens</u> , PI-434390	928 potted plants

North Carolina - Manteo Field Office

Dwayne Hinson, District Conservationist

(Material delivered to planting site on Croatan Sound)

<u>Spartina alterniflora</u>	3,000 potted plants
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Virginia - Virginia Beach Field Office

Louis Cullipher, District Conservationist

(Material delivered to planting site at detention basin in Community College)

<u>Spartina alterniflora</u>	1,280 potted plants
<u>Spartina patens</u>	620 potted plants

Washington - Pullman Plant Materials Center

Clarence Kelley, Manager

<u>Populus sp.</u> , T-22896, 'Tower'	100 cuttings
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Washington - State Office

John Oyler, Plant Materials Specialist, Spokane

Salix x Cottetii, PI-434285

30 cuttings

Salix hastata, PI-434286

30 cuttings

Salix sericea, T-999

30 cuttings

APPENDIX IX  
FOREIGN SHIPMENTS





## Foreign Shipments

One of the functions of the NPMC is to assemble and distribute seed and plants to meet foreign requests. Requests may come directly to the NPMC, to field plant materials centers, or to plant materials specialists. Assembly of seed at the center prevents duplication, since many times the person or organization places requests for the same material with several sources. It also allows the material to be shipped in one package, thus arriving at its destination as a unit.

When all seed or plants needed to fill a foreign request are acquired, proper paperwork is prepared and the material is transferred to the Plant Germplasm Quarantine Center of the Animal and Plant Health Inspection Service (APHIS) for inspection. When the material is cleared, it is shipped to the requestor.

Listed below are the foreign shipments made in 1981, totalling 280 accessions sent to 42 cooperators in 26 countries:

Argentina - Aldo G. Cassola, National Institute of Agricultural Technology,  
S. C. de Bariloche

Lotus tenuis, T-2494

Argentina - Nicholas C. Dantur, Agro-Industrial Experiment Station,  
San Miguel de Tucuman

Lespedeza cuneata, PI-90356, PI-173989, PI-186171, PI-207719, PI-246769,  
PI-259460, PI-259759, PI-310409

Lespedeza cuneata, PI-349417, 'Bee-soor'

Lespedeza cuneata, PI-421872, 'Appalow'

Lespedeza cuneata, PI-421873, 'Okinawa'

Argentina - Hector R. Pagliaricci, Faculty of Agriculture, National University  
of Rio Cuarto, Rio Cuarto

Agropyron ciliare, PI-377532

Agropyron dasystachyum, T-7219

Agropyron desertorum, T-6634

Agropyron elongatum 'Largo'

Agropyron intermedium 'Tegmar'

Agropyron pectiniforme, PI-297896

Agropyron smithii, PI-432399, PI-432400

Agropyron smithii 'Arriba'

Agropyron trachycaulum, T-11326  
Agropyron trichophorum 'Trigograss'  
Bromus brevis, T-16714  
Bromus carinatus 'Cucamonga'  
Bromus inermis, PI-368862, PI-380764, T-11336  
Bromus inermis 'Southland'  
Bromus mollis 'Blando'  
Bromus tomentellus, PI-383615  
Bromus unioloides 'Nakura'  
Bromus unioloides, PI-377533, PI-285317  
Bromus unioloides 'Prairie'  
Bromus vernalis, T-16753  
Bromus sp., T-16755  
Chloris distichophylla, PI-421755  
Chloris gayana 'Bell'  
Festuca ampla, T-16873  
Festuca arizonica 'Redondo'  
Festuca arundinacea, PI-150156, PI-380843  
Festuca arundinacea 'Tweeddale'  
Festuca arundinacea 'Ken-Hi'  
Festuca arundinacea 'Goar'  
Festuca arundinacea, T-11344  
Festuca arundinacea ssp. letourneuxiana St. Yves, T-11348  
Festuca elegans, T-16877  
Festuca pratensis, PI-380858  
Phalaris aquatica 'Perla'  
Phalaris aquatica 'Sirolan'  
Phalaris aquatica 'Sirosa'

Phalaris aquatica, T-7039

Trifolium fragiferum, PI-204509, PI-254916, PI-260983, PI-284259,  
PI-284260, PI-284265, PI-297986

Trifolium pratense, PI-311488, PI-311489, PI-376880

Trifolium radiosum, PI-120171

Trifolium repens, PI-161363, PI-311490, PI-311494

Australia - V. B. Eggemeyer, Kogn, Queensland

Bouteloua gracilis, PI-439880, 'Hachita'

Australia - I. M. Laszlo, Australian Capital Territory

Lespedeza cuneata Common

Lespedeza cuneata 'Appalow'

Lespedeza cuneata 'AM-312'

Lespedeza cuneata 'Arlington'

Lespedeza cuneata 'Interstate'

Lespedeza cuneata 'Serala'

Lespedeza virgata 'Ambro'

Australia - I. J. Packer, Soil Conservation Service Research Center,  
New South Wales

Festuca arizonica 'Redondo'

Muhlenbergia wrightii 'El Vado'

Oryzopsis hymenoides 'Paloma'

Sorghastrum nutans 'Llano'

Australia - Roger Standen, Department of Agriculture, Swan Hill, Victoria

Agropyron elongatum 'Alkar'

Belgium - Tillo Behaeghe, Royal University of Ghent, Ghent

Coronilla varia 'Chemung'

Robinia fertilis 'Arnot'

Trifolium ambiguum, PI-325489

Bhutan - W. Roder, Department of Agriculture, Bumthang

Agropyron desertorum 'Nordan'

Agropyron spicatum 'Secar'

Coronilla varia 'Emerald'

Coronilla varia 'Chemung'

Lathyrus latifolius, T-2003, T-2004

Lathyrus sylvestris 'Lathco'

Lespedeza cuneata 'Appalow'

Lespedeza cuneata 'Okinawa'

Lotus corniculatus 'Cascade'

Lupinus angustifolius, PI-280627

Lupinus angustifolius 'Pasco White'

Melilotus alba 'Pioneer'

Melilotus alba, PI-290832

Melilotus officinalis, PI-289313, PI-289315

Pueraria lobata

Trifolium ambiguum, PI-284003, PI-284004

Trifolium medium

Vicia tenuifolia, T-9187

Canada - Raynald Drapeau, Experimental Farm, Normandin, Quebec

Coronilla varia 'Chemung'

Canada - L. P. Folkins, Alberta Department of Agriculture, Lacombe, Alberta

Agropyron riparium 'Sodar'

Bromus inermis 'Manchar'

Coronilla varia 'Chemung'

Festuca ovina 'Covar'

Lathyrus sylvestris 'Lathco'

Canada - Ron Hambly, Markham, Ontario

Salix gracilistyla, T-7208

Salix purpurea 'Streamco'

Canada - H. M. Holm, Saskatchewan Department of Agriculture, Regina, Saskatchewan

Elymus triticoides 'Shoshone'

Canada - J. D. McElgunn, Canadian Department of Agriculture, Kamloops, B. C.

Agropyron inermis 'Whitmar'

Canada - Pierre Paquette, Pepiniere Abbotsford Nursery, Inc.,  
Saint Paul d'Abbotsford, Quebec

Populus canadensis 'Imperial'

Canada - S. Smoliak, Canadian Department of Agriculture, Lethbridge, Alberta

Agropyron smithii 'Rosana'

Chile - Fred M. Schlegel, University of Chile, Valdivia

Coronilla varia 'Emerald'

Coronilla varia 'Chemung'

China - C. C. Chang, Chinese Association of Agricultural Science Societies,  
Beijing

Agropyron dasystachyum 'Critana'

Agropyron elongatum 'Alkar'

Agropyron inerme 'Whitmar'

Agropyron riparium 'Sodar'

Agropyron sibiricum 'P-27'

Agropyron spicatum 'Secar'

Agropyron trachycaulum 'Primar'

Dactylis glomerata 'Pomar'

Elymus cinereus 'Magnar'

Pinus banksiana

Pinus ponderosa



Costa Rica - Arturo Solanau, San Padro, San Rosa

Coronilla varia 'Chemung'

Lathyrus sylvestris 'Lathco'

Czechoslovakia - Ivo Barnes, Department of Genetic Resources, Praha, Ruzyne

Dactylis glomerata 'Masshardy'

Festuca arundinacea 'Kenhy'

Festuca arundinacea 'Kenwell'

Poa pratensis 'Sodco'

England - C. W. Mathews, Mill Race Nursery, Colchester, Essex

Lonicera maackii 'Rem-Red'

England - Leo Pemberton, Royal Botanical Gardens, Kew, Richmond, Surrey

Lonicera maackii 'Rem-Red'

France - Albert Genel, Louvilliers, Vernouillet

Monarda punctata, PI-326567

France - M. Gillet, National Institute of Agronomic Research, Lusignan

Agropyron elongatum 'Jose'

Agropyron trichophorum 'Luna'

Bothriochloa ischaemum 'Ganada'

Bouteloua curtipendala, T-4495

Bouteloua gracilis 'Hachita'

Buchloe dactyloides 'Texoka'

Panicum coloratum 'Sel-75'

Panicum plenum, T-4611

Panicum virgatum 'Alamo'

France - Pierre Parneix, National School of Plant Technology, Rennes

Lathyrus sylvestris 'Lathco'

Hungary - L. Holly, Research Center for Agrobotany, Tapieszeie

Vicia grandiflora, T-2160

Vicia leavenworthi, T-17268

India - Director, National Bureau of Plant Genetic Resources, New Delhi

Manisuris selloana, PI-337546

Manisuris selloana, PI-337547

Israel - A. Weinstrin, Ministry of Agriculture, Doar Na Lev Hasharon

Prosopis chilensis, T-6436, A-19036

Prosopis glandulosa var. glandulosa, T-17117

Prosopis juliflora, T-3917

Prosopis juliflora var. torreyana, A-19033

Prosopis juliflora var. velutina, T-17118

Prosopis pubescens, T-17119, A-19169

Prosopis tamaruga, T-17120

Italy - Anselmo Stella, Italian Seed Society, Seed Testing Laboratory, Bologna

Agropyron elongatum 'Jose'

Agropyron intermedium 'Tegmar'

Agropyron riparium 'Sodar'

Agropyron smithii 'Arriba'

Agropyron smithii 'Barton'

Agropyron smithii 'Rosana'

Agropyron trichophorum 'Luna'

Bouteloua curtipendala 'Vaughn'

Bouteloua gracilis 'Lovington'

Bromus biebersteinii 'Regar'

Bromus marginatus 'Bromar'

Elymus cinerus 'Magnar'

Festuca arizonica 'Redondo'  
Lathyrus sylvestris 'Lathco'  
Oryzopsis hymenoides 'Largo'  
Panicum clandestinum 'Tioga'  
Panicum virgatum 'Blackwell'  
Schizachrium scoparium 'Pastura'

Japan - Takao Murata, National Grassland Research Institute, Nishinasuno, Tochigi

Panicum antidotale, T-4780, T-7307, PI-268410, PI-315719, PI-315720,  
PI-331180, PI-410164, PI-410165, PI-410166

Mauritania and North Cameroon - George White, Plant Introduction Officer,  
Beltsville, Maryland, U. S. A.

Atriplex halimus, A-19460, PL-73

Atriplex nummularia, PL-328

Brachiaria decumbens, PI-316445, PI-344767, PI-344772, PI-355713, PI-355744,  
PI-355916, PI-393958, PI-401522, PI-404609

Brachiaria ruziziensis, PI-316448, PI-365429, PI-379628

Desmanthus virgatus, PMT-2407, PMT-2408, A-18767, PMT-2409

Lathyrus sativus, PI-283546, PI-283548, PI-283560, PI-283563

Paspalum plicatulum, PI-353399

Stylosanthes guyanensis, PI-311267

New Zealand - B. T. Bulloch, Water and Soil Organization, Palmerston North

Arctostaphylos glandulosa, LK-459

Arctostaphylos patula, LK-189

Arctostaphylos nevadensis, LK-504

Ceanothus cordulatus, LK-780

Ceanothus cuneatus, LK-453

Ceanothus fendleri, A-17780

Ceanothus integerrimus, LK-196

South Africa - C. J. Wilken, Embassy of South Africa, Washington, D. C.

Lespedeza japonica, T-7175

Lespedeza thunbergii 'VA-70'

Panicum clandestinum 'Tioga'

Robinia fertilis 'Arnot'

Trifolium ambiguum, T-2616

Spain - S. A. Agrar, Zaragoza Airport, Zaragoza

Dactylis glomerata 'Latar'

Spain - Cesar F. Sanchez, Rhizobium Laboratory, Salamanca

Bromus inermis 'Manchar'

Dactylis glomerata 'Latar'

Lotus corniculatus 'Cascade'

Syria - S. Ceccarelli, International Center for Agricultural Research in  
the Dry Areas, Aleppo

Agropyron smithii 'Arriba'

Agropyron intermedium 'Amur'

Agropyron elongatum 'Largo'

Bothriochloa ischaemum, PI-107017

Buchloe dactyloides 'Mesa'

Bouteloua curtipendala 'Vaughn'

Bouteloua curtipendala, PI-421281

Eragrostis curvula, PI-203347

Onobrychis viciifolia 'Eski'

Onobrychis viciifolia 'Melrose'

Onobrychis viciifolia 'Remont'

Oryzopsis hymenoides, T-4607

Panicum virgatum 'Kanlow'

Panicum antidotale, T-3834

Ceanothus prostratus, LK-225

Ceanothus velutinus, LK-787

Cercocarpus betuloides, PL-4-71

Cercocarpus montanus 'Montane'

Eriogonum fasciculatum, LK-1517

Lotus scorpius, LK-1056

Purshia tridentata, A-20292, LK-645, NM-503

Purshia glandulosa, NM-581

New Zealand - J. C. Patterson, Pyne, Gould, Guinness, Ltd., Christchurch

Bouteloua gracilis 'Hachita'

New Zealand - Robert Scott, Invermay Agricultural Center, Mosgiel

Lotus crassifolius

Lotus procumbens jepsoni

Lotus purshianus

Nigeria - Bill Fitzgerald, Agricultural Development Program, Jos, Plateau

Aeschynomene americana, PI-421680

Paspalum notatum

Nouokchott (I. D.) - M. Wanasanga, Department of State, Washington, D. C.

Elymus giganteus 'Volga'

Poland - Department of Central Plant Collection, Poland

Bromus inermis 'Southland'

Bromus inermis 'Fox'

Bromus inermis 'Sac'

Bromus inermis 'Manchar'

Bromus unioloides 'Prairie'

Bromus uniolcides 'Chapel Hill'



Schizachyrium scoparium 'Alpous'

Tunisia - Irving W. Fobair, Department of State, Washington, D. C.

Agropyron intermedium 'Slate'

Dactylis glomerata 'Potomac'

Festuca arundinacea 'Fawn'

Festuca arundinacea 'Alta'

Lolium-Festuca Cross 'Kenhy'

Medicago sativa 'Rhizoma'

Pennisetum americanum 'Gahi 3'

Pennisetum americanum 'Tifleaf 1'

Pennisetum typhoides 'Millex 23'



APPENDIX X  
TIDAL AREA EROSION CONTROL PROJECT



### Tidal Area Erosion Control Projects

The National Plant Materials Center assists the Cape May Plant Materials Center in establishing and evaluating field plantings along the North Atlantic coast. With its large greenhouse capacity, the NPMC grew large quantities of smooth cordgrass plants and saltmeadow cordgrass plants. The plants were distributed by the NPMC as follows:

<u>Destination</u>	<u>Smooth</u>	<u>Saltmeadow</u>	<u>Total</u>
State of VA	11,000	7,000	18,000
Manteo FO, NC	3,000	--	3,000
Warsaw FEP, VA	--	1,800	1,800
Chestertown FEP, MD	--	1,800	1,800
Westhampton FEP, NY	--	1,800	1,800
Virginia Beach FO, VA	<u>1,300</u>	<u>600</u>	<u>1,900</u>
TOTAL	15,300	13,000	28,300

NPMC staff gave planting advice at the Manteo and Virginia Beach Field Offices, and helped plant at the Field Evaluation sites. Evaluations were performed throughout the year at the Chestertown and Warsaw FEPs. A joint US-Israel Agricultural Research and Development Project, herbaceous planting and woody fertilization study on back dune areas, was also established at the Back Bay Wildlife Refuge in Virginia with NPMC assistance.





APPENDIX XI  
ORCHARDGRASS DROUGHT TOLERANCE PROJECT



* **	YR RC	PI NUMBER	GENUS	SPECIES	PLOT NUMBER	M M I F C R T L	SEED DATE	EMERG DATE	PRP BY	TRANS DATE	R R D I N O	R R C H E R	R R R R D R	FOL HT	V I	BLOOM DATE	SEED MAT DATE	PCT SRV	DORM DATE	CODE 1
*	80	1917T	DACTYLIS	GLOMERATA	1/27		04/80				3	5	5	45	I					
*	80	1917T	DACTYLIS	GLOMERATA	2/27		04/20				1	4	4	40	4					
*	80	1917T	DACTYLIS	GLOMERATA	3/17		04/20				1	5	5	40	3					
*	80	7230T	DACTYLIS	GLOMERATA	1/15		04/20				1	6	6	42	2					
*	80	7230T	DACTYLIS	GLOMERATA	2/25		04/20				1	6	6	42	3					
*	80	7230T	DACTYLIS	GLOMERATA	3/20		04/20				1	5	5	40	3					
*	80	7231T	DACTYLIS	GLOMERATA	1/7		04/20				1	4	4	30	7					
*	80	7231T	DACTYLIS	GLOMERATA	2/28		04/20				1	5	5	30	7					
*	80	7231T	DACTYLIS	GLOMERATA	3/9		04/80				1	5	5	27	7					
*	80	7232T	DACTYLIS	GLOMERATA	1/22		04/20				1	5	5	37	4					
*	80	7232T	DACTYLIS	GLOMERATA	2/7		04/80				1	6	6	30	7					
*	80	7232T	DACTYLIS	GLOMERATA	3/3		04/20				5	5	5	37	4					
*	80	7233T	DACTYLIS	GLOMERATA	1/2		04/21				1	5	5	42	2					
*	80	7233T	DACTYLIS	GLOMERATA	2/21		04/80				3	5	5	47	1					
*	80	7233T	DACTYLIS	GLOMERATA	3/8		04/20				3	5	5	40	3					
*	80	7234T	DACTYLIS	GLOMERATA	1/33		04/20				3	5	5	42	2					
*	80	7234T	DACTYLIS	GLOMERATA	2/9		04/80				3	5	5	47	1					
*	80	7234T	DACTYLIS	GLOMERATA	3/1		04/20				1	6	6	42	2					
*	80	7235T	DACTYLIS	GLOMERATA	1/1		04/21				1	5	5	42	2					
*	80	7235T	DACTYLIS	GLOMERATA	2/5		04/20				5	6	6	45	2					
*	80	7235T	DACTYLIS	GLOMERATA	3/12		04/20				3	5	5	45	1					
*	80	7236T	DACTYLIS	GLOMERATA	1/13		04/20				1	5	5	35	5					
*	80	7236T	DACTYLIS	GLOMERATA	2/33		04/20				3	6	6	35	6					
*	80	7236T	DACTYLIS	GLOMERATA	3/32		04/20				3	6	6	30	6					
*	80	7237T	DACTYLIS	GLOMERATA	1/4		04/21				1	5	5	35	5					
*	80	7237T	DACTYLIS	GLOMERATA	2/14		04/80				1	5	5	40	4					
*	80	7237T	DACTYLIS	GLOMERATA	3/21		04/20				1	6	6	35	5					
*	80	7238T	DACTYLIS	GLOMERATA	1/21		04/20				3	4	4	42	2					
*	80	7238T	DACTYLIS	GLOMERATA	2/6		04/20				3	5	5	42	3					
*	80	7238T	DACTYLIS	GLOMERATA	3/7		04/20				1	5	5	42	2					
*	80	7239T	DACTYLIS	GLOMERATA	1/29		04/20				1	5	5	42	2					
*	80	7239T	DACTYLIS	GLOMERATA	2/12		04/20				3	6	6	42	3					
*	80	7239T	DACTYLIS	GLOMERATA	3/4		04/20				1	5	5	40	3					
*	80	7240T	DACTYLIS	GLOMERATA	1/14		04/20				1	5	5	32	6					
*	80	7240T	DACTYLIS	GLOMERATA	2/17		04/20				1	5	5	40	4					
*	80	7240T	DACTYLIS	GLOMERATA	3/15		04/20				1	5	5	37	4					
*	80	7241T	DACTYLIS	GLOMERATA	1/11		04/20				1	6	6	25	8					
*	80	7241T	DACTYLIS	GLOMERATA	2/32		04/20				1	6	6	30	7					
*	80	7241T	DACTYLIS	GLOMERATA	3/14		04/20				1	5	5	35	5					
*	80	7242T	DACTYLIS	GLOMERATA	1/5		04/21				1	5	5	40	3					
*	80	7242T	DACTYLIS	GLOMERATA	2/4		04/80				3	6	6	45	2					
*	80	7242T	DACTYLIS	GLOMERATA	3/30		04/20				3	6	6	42	2					
*	80	7243T	DACTYLIS	GLOMERATA	1/32		04/20				1	5	5	42	2					
*	80	7243T	DACTYLIS	GLOMERATA	2/15		04/20				1	6	6	45	2					
*	80	7243T	DACTYLIS	GLOMERATA	3/22		04/20				3	6	6	42	2					
*	80	7244T	DACTYLIS	GLOMERATA	1/18		04/20				1	3	3	40	3					

*	YR	PI	RC	NUMBER	GENUS	SPECIES	PLOT NUMBER	M M M			R T L	SEED DATE	EMERG DATE	PRP BY	TRANS DATE	R D I	R R I	R R C	R R H	R R D	FOL HT	V I	BLOOM DATE	SEED MAT DATE	PCT SRV	DORM DATE	CODE 1
								I	F	C																	
***																											
*	80			7244T	DACTYLIS	GLOMERATA	2/16					04/80				1	6	6	6	6	42	3					
*	80			7244T	DACTYLIS	GLOMERATA	3/16					04/20				3	5	5	5	5	35	5					
*	80			7245T	DACTYLIS	GLOMERATA	1/23					04/20				3	5	5	5	5	40	3					
*	80			7245T	DACTYLIS	GLOMERATA	2/31					04/20				1	5	5	5	5	40	4					
*	80			7245T	DACTYLIS	GLOMERATA	3/2					04/20				3	6	5	4	6	40	3					
*	80			7247T	DACTYLIS	GLOMERATA	1/25					04/20				1	5	5	5	5	35	5					
*	80			7247T	DACTYLIS	GLOMERATA	2/29					04/20				1	4	4	4	4	40	4					
*	80			7247T	DACTYLIS	GLOMERATA	3/10					04/20				1	5	5	5	5	40	3					
*	80			7364T	DACTYLIS	GLOMERATA	1/9					04/20				1	5	5	5	5	32	6					
*	80			7364T	DACTYLIS	GLOMERATA	2/1					04/20				1	4	4	4	4	42	3					
*	80			7364T	DACTYLIS	GLOMERATA	3/13					04/20				1	4	4	4	4	35	5					
*	80			7365T	DACTYLIS	GLOMERATA	1/28					04/80				5	5	5	5	5	42	2					
*	80			7365T	DACTYLIS	GLOMERATA	2/18					04/20				1	5	5	5	5	45	2					
*	80			7365T	DACTYLIS	GLOMERATA	3/29					04/20				1	6	6	6	6	40	3					
*	80			7623T	DACTYLIS	GLOMERATA	1/16					04/20				1	5	5	5	5	45	1					
*	80			7623T	DACTYLIS	GLOMERATA	2/19					04/20				3	5	5	5	5	47	1					
*	80			7623T	DACTYLIS	GLOMERATA	3/31					04/20				1	6	6	6	6	37	4					
*	80			7624T	DACTYLIS	GLOMERATA	1/6					04/20				1	5	5	5	5	35	5					
*	80			7624T	DACTYLIS	GLOMERATA	2/13					04/20				1	6	6	6	6	42	3					
*	80			7624T	DACTYLIS	GLOMERATA	3/24					04/20				1	6	6	6	6	32	6					
*	80			11141T	DACTYLIS	GLOMERATA	1/12					04/20				1	5	5	5	5	42	2					
*	80			11141T	DACTYLIS	GLOMERATA	2/10					04/80				3	7	7	7	7	45	2					
*	80			11141T	DACTYLIS	GLOMERATA	3/26					04/20				1	6	6	6	6	35	5					
*	80			11142T	DACTYLIS	GLOMERATA	1/19					04/80				3	5	5	5	5	42	2					
*	80			11142T	DACTYLIS	GLOMERATA	2/24					04/20				1	6	6	6	6	42	3					
*	80			11142T	DACTYLIS	GLOMERATA	3/23					04/20				1	6	6	6	6	40	3					
*	80			14335T	DACTYLIS	GLOMERATA	1/3					04/21				1	5	5	5	5	45	1					
*	80			14335T	DACTYLIS	GLOMERATA	2/26					04/20				1	5	5	5	5	45	2					
*	80			14335T	DACTYLIS	GLOMERATA	3/19					04/20				1	5	5	5	5	40	3					
*	80			14336T	DACTYLIS	GLOMERATA	1/10					04/20				1	6	5	4	6	40	3					
*	80			14336T	DACTYLIS	GLOMERATA	2/23					04/20				1	5	5	5	5	42	3					
*	80			14336T	DACTYLIS	GLOMERATA	3/6					04/20				1	6	6	6	6	40	3					
*	80			14337T	DACTYLIS	GLOMERATA	1/8					04/20				3	8	8	8	8	20	9					
*	80			14337T	DACTYLIS	GLOMERATA	2/30					04/20				3	8	8	8	8	22	9					
*	80			14337T	DACTYLIS	GLOMERATA	3/33					04/20				5	9	9	9	9	17	9					
*	80			14338T	DACTYLIS	GLOMERATA	1/24					04/20				1	4	4	4	4	37	4					
*	80			14338T	DACTYLIS	GLOMERATA	2/2					04/80				1	4	4	4	4	40	4					
*	80			14338T	DACTYLIS	GLOMERATA	3/5					04/20				3	5	5	5	5	40	3					
*	80			14339T	DACTYLIS	GLOMERATA	1/31					04/20				1	5	5	5	5	45	1					
*	80			14339T	DACTYLIS	GLOMERATA	2/20					04/20				3	5	5	5	5	47	1					
*	80			14339T	DACTYLIS	GLOMERATA	3/25					04/20				3	6	6	6	6	37	4					
*	80			16777T	DACTYLIS	GLOMERATA	1/17					04/20				1	4	4	4	4	45	1					
*	80			16777T	DACTYLIS	GLOMERATA	2/22					04/20				1	3	3	3	3	45	2					
*	80			16777T	DACTYLIS	GLOMERATA	3/18					04/20				1	4	4	4	4	40	3					
*	80			421012	DACTYLIS	GLOMERATA	1/30					04/20				1	6	6	6	6	30	7					
*	80			421012	DACTYLIS	GLOMERATA	2/8					04/20				1	4	4	4	4	47	1					



PP-24I009R

SS-ALL

PMC-24

PLANTS.  
06/23/1982

FIRST YEAR INITIAL EVALUATION-HERBACEOUS

NPMDS-8

* YR RC	PI NUMBER	GENUS	SPECIES	PLOT NUMBER	M I R	M F T	M C L	SEED DATE	EMERG DATE	PRP BY	TRANS DATE	R D I N	R C H O	R R R R	FOL HT	V I	BLOOM DATE	SEED MAT DATE	PCT SRV	DORM DATE	CODE 1
***	80	421012	DACTYLIS	3/27				04/20				1	5	5	25	8					
*	80	434045	FESTUCA	1/26				04/20				5	6	6	30	7					
	80	434045	FESTUCA	2/3				04/20				5	6	6	37	5					
	80	434045	FESTUCA	3/11				04/20				5	6	6	32	6					
	80	434045	FESTUCA	1/20				04/20				1	5	5	40	3					
	80	443270	DACTYLIS	2/11				04/20				1	6	6	40	4					
	80	443270	DACTYLIS	3/28				04/20				1	4	4	40	3					



* RC	YR	PI	PLANT SYMBOL	YR	IFC	ROOT SYSTEM	MTH SPR	V	FIRST		SEC	CLIP	WT	DATE	STA		FOL	FOL	WD	RRRR		SSSS	AFUSL	MLNHG	DATE	MAT	SEED	CODE
									CLIP	DATE				DATE	2XB	HT				DICHD	INOR							
***	81	7236T	DAGL					3	05/02	295		430		06/16	53	55					541							35
*	81	7236T	DAGL					1	05/02	285		460		06/16	54	50					451							35
*	80	7237T	DAGL					5							55	35					1	56						
*	80	7237T	DAGL					4							44	40					1	55						
*	80	7237T	DAGL					5							55	35					1	66						
*	81	7237T	DAGL					5	05/02	205		325		06/16	47	60					431							30
*	81	7237T	DAGL					6	05/02	115		380		06/16	55	55					455							50
*	81	7237T	DAGL					4	05/02	225		405		06/16	56	55					541							90
*	80	7238T	DAGL					2							55	42					3	44						
*	80	7238T	DAGL					3							54	42					3	55						
*	80	7238T	DAGL					2							56	42					1	55						
*	81	7238T	DAGL					5	05/02	150		405		06/16	54	55					444							70
*	81	7238T	DAGL					3	05/02	365		600		06/16	55	55					364							80
*	81	7238T	DAGL					6	05/02	145		485		06/16	44	65					454							90
*	80	7239T	DAGL					2							54	42					1	55						
*	80	7239T	DAGL					3							44	42					3	66						
*	80	7239T	DAGL					3							54	40					1	55						
*	81	7239T	DAGL					2	05/02	330		640		06/16	35	60					442							30
*	81	7239T	DAGL					6	05/02	65		530		06/16	53	50					546							55
*	81	7239T	DAGL					2	05/02	360		510		06/16	65	65					541							95
*	80	7240T	DAGL					6							55	32					1	55						
*	80	7240T	DAGL					4							45	40					1	55						
*	80	7240T	DAGL					4							55	37					1	55						
*	81	7240T	DAGL					5	05/02	190		435		06/16	35	55					454							70
*	81	7240T	DAGL					5	05/02	200		450		06/16	56	45					563							70
*	81	7240T	DAGL					4	05/02	240		495		06/16	44	60					553							70
*	80	7241T	DAGL					8							55	25					1	66						
*	80	7241T	DAGL					7							55	30					1	66						
*	80	7241T	DAGL					5							56	35					1	55						
*	81	7241T	DAGL					5	05/02	225		390		06/16	44	55					671							35
*	81	7241T	DAGL					4	05/02	185		310		06/16	44	60					541							55
*	81	7241T	DAGL					4	05/02	160		510		06/16	64	65					643							75
*	80	7242T	DAGL					3							43	40					1	55						
*	80	7242T	DAGL					2							55	45					3	66						
*	80	7242T	DAGL					2							54	42					3	66						
*	81	7242T	DAGL					4	05/02	285		380		06/16	34	60					434							35
*	81	7242T	DAGL					5	05/02	230		440		06/16	56	60					455							70
*	81	7242T	DAGL					1	05/02	280		365		06/16	55	45					543							80
*	80	7243T	DAGL					2							55	42					1	55						
*	80	7243T	DAGL					2							42	45					1	66						
*	80	7243T	DAGL					2							54	42					3	66						
*	81	7243T	DAGL					6	05/02	215		445		06/16	46	55					545							50
*	81	7243T	DAGL					4	05/02	85		270		06/16	65	55					467							40
*	81	7243T	DAGL					4	05/02	160		395		06/16	55	45					443							90
*	80	7244T	DAGL					3							42	40					1	33						
*	80	7244T	DAGL					3							43	42					1	66						

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* RC	YR PI	PLANT SYMBOL	MM YR IFC PL	ROOT RTL	SYSTEM	MTH SPRD	FIRST V	CLIP DATE	WT	REGR DATE	SEC CLIP DATE	SEC CLIP WT	SEC REGR DATE	FFF STA ZXB	FOL HT	FOL WD	RRRR DICHD INOR	SSSS AFUSL MLNHG	FIRST BOOT DATE	FIRST MAT DATE	SEED HT	CODE 1
***	80	7244T	DAGL				5							55	35		3	55				50
*	81	7244T	DAGL				7	05/02	110		06/16	520		45	65		545				30	
*	81	7244T	DAGL				5	05/02	230		06/16	525		46	65		664				75	
*	81	7244T	DAGL				3	05/02	280		06/16	445		54	60		641					
*	80	7245T	DAGL				3							55	40		3	55				
*	80	7245T	DAGL				4							43	40		1	55				
*	80	7245T	DAGL				3							55	40		3	66				
*	81	7245T	DAGL				6	05/02	145		06/16	530		43	60		435				55	
*	81	7245T	DAGL				3	05/02	320		06/16	505		42	60		643				90	
*	81	7245T	DAGL				2	05/02	285		06/16	395		46	65		451				85	
*	80	7247T	DAGL				5							55	35		1	55				
*	80	7247T	DAGL				4							55	40		1	44				
*	80	7247T	DAGL				3							56	40		1	55				
*	80	7247T	DAGL				6	05/02	155		06/16	540		33	60		343				60	
*	81	7247T	DAGL				5	05/02	245		06/16	555		54	60		454				75	
*	81	7247T	DAGL				3	05/02	375		06/16	560		64	65		451				75	
*	80	7364T	DAGL				6							55	32		1	55				
*	80	7364T	DAGL				3							55	42		1	44				
*	80	7364T	DAGL				5							45	35		1	44				
*	81	7364T	DAGL				4	05/02	220		06/16	365		34	65		462				30	
*	81	7364T	DAGL				5	05/02	305		06/16	475		36	60		443				55	
*	81	7364T	DAGL				4	05/02	185		06/16	490		54	55		551				55	
*	80	7365T	DAGL				2							53	42		5	55				
*	80	7365T	DAGL				2							44	45		1	55				
*	80	7365T	DAGL				3							55	40		1	66				
*	81	7365T	DAGL				4	05/02	220		06/16	515		53	60		443				30	
*	81	7365T	DAGL				5	05/02	185		06/16	465		65	60		455				70	
*	81	7365T	DAGL				3	05/02	300		06/16	270		44	50		552				80	
*	80	7623T	DAGL				1							53	45		1	55				
*	80	7623T	DAGL				1							43	47		3	55			70	
*	80	7623T	DAGL				4							55	37		1	66			85	
*	81	7623T	DAGL				4	05/02	200		06/16	460		35	65		345				70	
*	81	7623T	DAGL				6	05/02	90		06/16	495		44	55		565				70	
*	81	7623T	DAGL				2	05/02	280		06/16	320		55	50		552				85	
*	80	7624T	DAGL				5							54	35		1	55				
*	80	7624T	DAGL				3							43	42		1	66				
*	80	7624T	DAGL				6							55	32		1	66				
*	81	7624T	DAGL				6	05/02	240		06/16	415		33	65		553				35	
*	81	7624T	DAGL				7	05/02	55		06/16	440		53	50		567				50	
*	81	7624T	DAGL				3	05/02	260		06/16	325		45	45		563				90	
*	80	11141T	DAGL				2							55	42		1	55				
*	80	11141T	DAGL				2							55	45		3	77				
*	80	11141T	DAGL				5							54	35		1	66				
*	81	11141T	DAGL				5	05/02	130		06/16	425		52	65		475				75	
*	81	11141T	DAGL				6	05/02	225		06/16	485		54	65		546				55	
*	81	11141T	DAGL				3	05/02	280		06/16	505		54	50		441				90	

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APPENDIX XII  
LITERATURE REVIEWS



## Literature Reviews

The NPMC receives numerous requests for information on plants, their culture, and use in conservation. Requests come from field plant materials centers, plant materials specialists, state and federal agencies, research organizations, and private individuals in this country and abroad. To service these requests, the NPMC maintains a generic file and utilizes the literature search capability of the National Agricultural Library (NAL). Publications cited in the searches can be requested and copies received from the NAL or other sources.

An assembly and reorganization of reference material at the NPMC was undertaken in 1981. References stored in several basement files were pulled together. Some were moved to the generic file and others were organized into special purpose plant materials files. Numerous articles on flora were added to the collections of texts on the subject. Nine hundred and sixty publications were catalogued and sent to the National Agricultural Library for their collection. The material forwarded dealt with soil conservation or agriculture in general. Most of it was published in the thirties and forties by USDA or university agriculture departments, although some dated back to the nineteenth century or was distributed by commercial or professional concerns.

Some of the major topics researched in 1981 were:

<u>Topic</u>	<u>Requestor</u>	<u>Publications Received</u>
<u>Aerva javanica</u> - adaptation to Australian and U. S. range for forage and erosion control under stress	NPMC (Foreign)	
<u>Atriplex</u> sp. - adaption to Australian and U. S. range for forage and erosion control under stress.	NPMC (Foreign)	
<u>Cenchrus setigerus</u> - adaptation to Australian and U. S. range for forage and erosion control under stress	NPMC (Foreign)	
<u>Eragrostis lehmannia</u> - adaptation to Austra- lian and U. S. range for forage and erosion control under stress.	NPMC (Foreign)	
<u>Ethylene</u> - role in breaking seed dormancy	NPMC	
<u>Landsat</u> - use of satellite imagery in monitoring vegetation	WA PMS	14
<u>Legumes</u> - use in no-till farming and effects on weed control, crop yields & rodents	NJ PMC	6

<u>Topic</u>	<u>Requestor</u>	<u>Publications Received</u>
<u>Lespedeza</u> - use as a cover crop and effect on crop yield, weed control, and rodent control	PLENTY Ag. Proj.	
<u>Leucenae</u> sp. - adaptation to Australian and U. S. range for forage and erosion control under stress	NPMC (Foreign)	
<u>Pinus brutia</u> - adaptation to Australian and U. S. range for forage and erosion control under stress	NPMC (Foreign)	
<u>Plant competition</u> - effect of grass and legumes on douglas fir and hemlock	WA PMS	
<u>Stylosanthes hamata</u> - application to Australian and U. S. range for forage and erosion control under stress.	NPMC (Foreign)	
<u>Tripsacum dactyloides</u> - factors which induce gynantherous flowering	MWNTC	
<u>Vegetation</u> - plants for acid coal mine spoils with manganese and aluminum tolerance	KY PMC	11
<u>Zostera</u> sp. - natural distribution and ecology; artificial methods of culture and establishment	NJ PMC	51



APPENDIX XIII  
PLANT SPECIMENS SUBMITTED FOR REIDENTIFICATION



## Plant Specimens Submitted for Reidentification

Another function of the NPMC is to maintain contacts for authoritative identification of plant specimens submitted by SCS personnel. The center staff also has the responsibility of observing new introductions for questions of identity. Questionable plants are collected, pressed and dried, and submitted to the Plant Taxonomy Laboratory of the Science and Education Administration for identification.

The following plants were grown at the NPMC or one of the field PMCs and submitted for identification in 1981:

<u>Accession</u>	<u>Original Name</u>	<u>Submitted By</u>	<u>Corrected Name or Status</u>
PI-409034	<u>Panicum maximum</u>	NPMC	<u>Panicum maximum</u> Jacq.
PI-439880	<u>Bouteloua gracilis</u>	Los Lunas	<u>Bouteloua gracilis</u> (Willd. ex H. B. K.)Lag ex Griffiths
NM-28	<u>Bouteloua curtipendala</u>	Los Lunas	<u>Bouteloua curtipendala</u> (Michx.)Torr.
T-5022	<u>Ligustrum amurense</u>	Rose Lake	<u>Ligustrum obtusifolium</u> Sieb. + Zucc.
--	<u>Dolicholus</u>	Americus	<u>Dipogon lignosus</u> (L.) Verde
DWH-1	<u>Juncus</u> sp.	Cape May	Insufficient specimen
DWH-2	<u>Juncus</u> sp.	Cape May	Insufficient specimen
PI-318602	<u>Onobrychis viciifolias</u>	Lockeford	Awaiting determination
AM-4059	<u>Carex</u> sp.	Americus	Awaiting determination
PI-172692	<u>Brachypodium pinnatum</u>	Americus	Awaiting determination



APPENDIX XIV  
GERMINATION TEST RESULTS ON NPMC SEED INVENTORY





Species	Accession	Year	Germ.	Hard	Total
<u>Achillea asiatica</u> (10 days in H <sub>2</sub> O) *	PI-380611	1972	0%	100%	100%
<u>Achillea conferta</u> *	PI-380610	1972	0%	100%	100%
(10 days in H <sub>2</sub> O)	PI-380610	1975	0%	100%	100%
<u>Achillea filipendulina</u> (10 days in H <sub>2</sub> O) *	PI-380604	1972	48%	40%	88%
<u>Achillea millefolium</u> (10 days in H <sub>2</sub> O) *	T-6625	1979	76%	0%	76%
" "	T-6626	1979	20%	0%	20%
" "	T-6627	1980	82%	0%	68%
" "	T-6627	1981	76%	0%	76%
" "	T-6628	1979	84%	0%	84%
" "	T-6628	1981	16%	0%	16%
" "	T-6629	1980	86%	0%	86%
" "	T-6629	1981	80%	0%	80%
" "	T-10600	1980	100%	0%	100%
" "	T-10600	1981	72%	12%	84%
" "	T-10601	1981	4%	96%	100%
" "	T-10602	1980	96%	0%	96%
" "	T-10602	1981	48%	4%	52%
" "	T-10603	1980	96%	0%	96%
" "	T-10603	1981	80%	20%	100%
" "	T-10604	1980	100%	0%	100%
" "	T-10604	1981	0%	100%	100%
" "	T-10606	1980	80%	0%	80%
" "	T-10606	1981	64%	8%	72%
" "	T-10607	1980	96%	0%	96%
" "	T-10607	1981	72%	8%	80%
" "	T-10608	1981	72%	28%	100%
" "	T-10611	1980	96%	0%	96%
" "	T-11404	1980	88%	0%	88%
" "	T-11404	1981	88%	0%	88%
" "	T-11422	1981	92%	4%	96%
" "	T-11433	1980	100%	0%	100%
" "	T-11433	1981	92%	0%	92%
" "	T-11467	1980	98%	0%	98%
" "	T-11646	1980	86%	0%	86%
" "	T-12238	1981	0%	44%	44%
" "	T-12821	1981	84%	4%	88%
" "	PI-292781	1962			
<u>Achillea ptarmica</u> (10 days in H <sub>2</sub> O)	T-6630	1980	92%	0%	92%
" "	T-6631	1980	64%	0%	64%
" "	T-10612	1980	100%	0%	100%
" "	T-10612	1981	84%	8%	92%
" "	T-10613	1980	96%	0%	96%
" "	T-11403	1980	88%	0%	88%
" "	T-11647	1981	96%	0%	96%
" "	T-12239	1981	96%	4%	100%
" "	T-12240	1980	96%	0%	96%
" "	T-12240	1981	68%	20%	88%
" "	T-12241	1980	92%	0%	92%
" "	T-12241	1981	100%	0%	100%
" "	T-12242	1980	64%	0%	64%
" "	T-12242	1981	84%	12%	96%
" "	T-12822	1980	84%	0%	84%
" "	T-12822	1981	84%	4%	88%
<u>Achillea santolina</u> (10 days in H <sub>2</sub> O) *	PI-380606	1972	92%	8%	100%

Species	Accession	Year	Germ.	Hard	Total
<u>Achillea santolina</u> (contd.) (10 days in H <sub>2</sub> O) *	PI-380608	1972	96%	4%	100%
" "	PI-380612	1972	80%	16%	96%
" "	PI-380614	1972	32%	56%	88%
" "	PI-380614	1975	0%	100%	100%
<u>Achillea sp.</u> (10 days in H <sub>2</sub> O) *	PI-380613	1972	28%	28%	56%
" "	PI-383527	1973	12%	44%	56%
" "	PI-383528	1973	0%	90%	90%
<u>Agropyron dasystachyum</u> x <u>Agrostis caninum</u> (14 days in H <sub>2</sub> O) *	T-27566	1981	76%	0%	76%
( <u>Agropyron dasystachyum</u> x <u>Agrostis caninum</u> ) x <u>A. dasystachyum</u> (14 days in H <sub>2</sub> O) *	T-27570	1981	64%	0%	64%
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>A. dasystachyum</u> (14 days in H <sub>2</sub> O) *	T-27587	1981	72%	0%	72%
( <u>Agropyron dasystachyum</u> x <u>Elymus glaucus</u> ) x <u>E. glaucus</u> (14 days in H <sub>2</sub> O) *	T-27588	1981	48%	0%	48%
<u>Agropyron dasystachyum</u> x <u>Sitanion hystrix</u> (14 days in H <sub>2</sub> O) *	T-27580	1981	88%	0%	88%
<u>Agropyron donianum</u> x <u>A. subsecundum</u> (14 days in H <sub>2</sub> O) *	T-27252	1981	56%	0%	56%
<u>Agropyron fibrosum</u> x <u>A. trachycaulum</u> (14 days in H <sub>2</sub> O) *	T-27253	1981	56%	0%	56%
<u>Agropyron fibrosum</u> x <u>Sitanion hystrix</u> (14 days in H <sub>2</sub> O) *	T-27579	1981	100%	0%	100%
<u>Agropyron intermedium</u> (28 days in H <sub>2</sub> O)	T-27427	1981	100%	0%	100%
" "	T-27432	1981	88%	0%	88%
" "	T-27434	1981	80%	0%	80%
" "	T-27435	1981	52%	0%	52%
" "	T-27436	1981	92%	0%	92%
" "	T-27439	1981	40%	0%	40%
" "	T-27440	1981	84%	0%	84%
" "	T-27442	1981	100%	0%	100%
" "	T-27444	1981	80%	0%	80%
" "	T-27445	1981	56%	0%	56%
" "	T-27446	1981	92%	0%	92%
" "	T-27449	1981	92%	8%	100%
" "	T-27450	1981	72%	0%	72%
" "	T-27451	1981	84%	0%	84%
" "	T-27453	1981	52%	0%	52%
" "	T-27454	1981	64%	0%	64%
" "	T-27457	1981	96%	0%	96%
" "	T-27459	1981	92%	0%	92%
" "	T-27462	1981	72%	0%	72%
" "	T-27463	1981	84%	0%	84%
" "	T-27464	1981	40%	0%	40%
" "	T-27465	1981	84%	0%	84%
" "	PI-131532	1970	24%	0%	24%
" "	PI-261098	1978	76%	0%	76%
<u>Agropyron intermedium</u> <u>trichiporum</u> (28 days in H <sub>2</sub> O)	T-27429	1981	88%	0%	88%
" "	T-27430	1981	100%	0%	100%
" "	T-27431	1981	88%	0%	88%
" "	T-27437	1981	80%	0%	80%
" "	T-27448	1981	92%	0%	92%
" "	T-27452	1981	96%	0%	96%
" "	T-27455	1981	84%	0%	84%

Species	Accession	Year	Germ.	Hard	Total	Species	Accession	Year	Germ.	Hard	Total
<u>Agropyron intermedium</u> (contd.) (28 days in H <sub>2</sub> O)	T-27456	1981	76%	0%	76%	<u>Bromus ramosus</u> ssp. <u>beneheni</u> (cont.) (28 days in H <sub>2</sub> O)*	T-7131	1981	76%	0%	76%
" "	T-27458	1981	84%	0%	84%	<u>Bromus ramosus</u> ssp. <u>ramosus</u> (28 days in H <sub>2</sub> O)*	T-7133	1980	96%	0%	96%
" "	T-27460	1981	28%	0%	28%	<u>Bromus tomentellus</u> (28 days in H <sub>2</sub> O)*	PI-380772	1981	80%	0%	80%
" "	T-27461	1981	68%	0%	68%	" "	PI-384811	1980	96%	0%	96%
" "	PI-106831	1965	28%	0%	28%	" "	PI-384811	1981	36%	0%	36%
" "	PI-116252	1978	0%	0%	0%	" "	PI-384817	1980	88%	0%	88%
" "	PI-220498	1978	76%	0%	76%	<u>Calamagrostis arundinacea</u> (21 days in H <sub>2</sub> O)*	PI-345968	1979	24%	0%	24%
" "	PI-229576	1978	36%	0%	36%	<u>Campanula alliariifolia</u> (12 days in H <sub>2</sub> O)**	T-7137	1980	28%	68%	96%
" "	PI-297872	1978	84%	0%	84%	<u>Campanula rapunculoides</u> (16 days in H <sub>2</sub> O)**	T-1936	1975	0%	100%	100%
<u>Agropyron intermedium</u> <u>trichophorum</u> (28 days in H <sub>2</sub> O)	PI-297876	1978	80%	0%	80%	<u>Campanula</u> sp. (12 days in H <sub>2</sub> O)**	T-6709	1972	10%	90%	100%
<u>Agropyron libanoticum</u> (28 days in H <sub>2</sub> O)*	T-27574	1981	36%	0%	36%	" "	T-6709	1980	88%	4%	92%
<u>Agropyron pectiniforme</u> (21 days in H <sub>2</sub> O)*	PI-273734	1978	40%	0%	40%	<u>Casuarina cunninghamiana</u> (14 days in H <sub>2</sub> O)	PI-308648	1965	0%	100%	100%
" "	PI-273735	1978	30%	0%	30%	" "	PI-316188	1965	0%	100%	100%
" "	PI-297896	1978	40%	0%	40%	<u>Casuarina stricta</u> (14 days in H <sub>2</sub> O)	T-19982	1980	12%	84%	96%
" "	PI-310369	1978	30%	0%	30%	" "	T-20973	1980	40%	50%	90%
" "	PI-315359		30%	0%	30%	<u>Casuarina torulosa</u> (14 days in H <sub>2</sub> O)	T-19983	1980	16%	36%	54%
" "	PI-315360	1978	40%	0%	40%	<u>Catalpa</u> sp. (21 days in H <sub>2</sub> O)*	PI-308649	1964	0%	0%	0%
" "	PI-315536	1978	40%	0%	40%	" "	PI-308650	1964	0%	0%	0%
" "	PI-316954	1978	30%	0%	30%	<u>Cerasus besseyi</u> (21 days in H <sub>2</sub> O)**	T-21226	1980	0%	100%	100%
" "	PI-370647	1978	20%	0%	20%	<u>Cerasus tomentosa</u> (21 days in H <sub>2</sub> O)**	T-21225	1980	0%	100%	100%
" "	PI-370649	1978	80%	0%	80%	<u>Cheiranthus allionii</u> (10 days in KNO <sub>3</sub> )	T-7143	1980	16%	0%	16%
" "	PI-370650	1978	50%	0%	50%	<u>Chrysanthemum leucanthemum</u> (8 days in H <sub>2</sub> O)	T-6626	1980	0%	0%	0%
" "	PI-370651	1977	30%	0%	30%	" "	T-6727	1979	4%	0%	4%
" "	PI-370651	1978	40%	0%	40%	" "	T-6727	1980	48%	0%	48%
" "	PI-370653	1978	20%	0%	20%	" "	T-6728	1980	68%	0%	68%
<u>Agropyron tillicarense</u> x <u>A. libanoticum</u> (28 days in H <sub>2</sub> O)*	T-27568	1981	32%	0%	32%	" "	T-11674	1979	68%	0%	68%
<u>Agropyron tillicarense</u> x <u>A. libanoticum</u> (28 days in H <sub>2</sub> O)*	T-27571	1981	52%	0%	52%	" "	T-12360	1980	60%	40%	100%
<u>Antirrhinum majus</u> (12 days in H <sub>2</sub> O)	T-12252	1980	88%	0%	88%	" "	T-14494	1980	84%	16%	100%
" "	T-14231	1980	25%	0%	25%	" "	T-15680	1980	0%	0%	0%
<u>Artemisia aucheri</u> (7 days in H <sub>2</sub> O)**	PI-380680	1972	0%	0%	0%	" "	T-15707	1980	16%	0%	16%
<u>Artemisia herba-alba</u> (7 days in H <sub>2</sub> O)**	PI-330692	1967	0%	0%	0%	" "	T-15920	1980	72%	28%	100%
<u>Artemisia vulgaris</u> (7 days in H <sub>2</sub> O)**	T-6672	1980	64%	0%	64%	" "	T-16361	1980	24%	16%	40%
" "	T-6672	1981	68%	0%	68%	" "	T-16362	1980	20%	12%	32%
<u>Aster novae-angliae</u> (28 days in H <sub>2</sub> O)**	T-10646	1981	0%	100%	100%	<u>Chrysanthemum leucanthemum</u> var. <u>meridionale</u> (8 days in H <sub>2</sub> O)	T-10730	1979	12%	28%	40%
" "	T-11654	1981	8%	0%	8%	<u>Cichorium intybus</u> (7 days in KNO <sub>3</sub> )	T-6733	1979	80%	0%	80%
<u>Setula nana</u> (21 days in H <sub>2</sub> O)	T-14028	1980	8%	68%	76%	" "	T-10698	1977	50%	50%	100%
<u>Setula papyrifera</u> (21 days in H <sub>2</sub> O)	T-12271	1980	0%	100%	100%	" "	T-14594	1978	50%	50%	100%
" "	T-12836	1980	0%	100%	100%	" "	T-14805	1979	20%	20%	40%
<u>Setula pendula</u> (21 days in H <sub>2</sub> O)	T-12652	1980	8%	92%	100%	" "	T-15334	1979	10%	70%	80%
" "	T-11825	1980	0%	100%	100%	" "	T-17720	1978	60%	40%	100%
" "	T-14127	1980	0%	100%	100%	" "	T-17721	1978	0%	100%	100%
<u>Setula verrucosa</u> (21 days in H <sub>2</sub> O)	T-12272	1980	8%	92%	100%	<u>Cichorium intybus</u> ssp. <u>intybus</u> (7 days in KNO <sub>3</sub> )	T-12307	1977	20%	80%	100%
" "	T-12273	1980	0%	100%	100%	" "	T-12308	1976	0%	100%	100%
<u>Blackiella conouplata</u> (7 days in KNO <sub>3</sub> )**	PI-415865	1978	88%	0%	88%	<u>Cleome serrulata</u> (14 days in KNO <sub>3</sub> )**	T-10863	1979	0%	100%	100%
<u>Bromus ramosus</u> ssp. <u>beneheni</u> (28 days in H <sub>2</sub> O)*	T-7131	1980	96%	0%	96%	<u>Coreopsis grandiflora</u> (21 days in H <sub>2</sub> O)*	T-1950	1974	56%	44%	100%
						<u>Coreopsis lanceolata</u> (21 days in KNO <sub>3</sub> )	T-10703	1981	80%	20%	100%
						" "	T-10704	1978	60%	40%	100%

Species	Accession	Year	Germ.	Hard	Total
<u>Coreopsis lanceolata</u> (contd.) (21 days in KNO <sub>3</sub> )	T-10704	1980	88%	12%	100%
" "	T-10704	1981	88%	8%	96%
" "	T-10705	1981	20%	80%	100%
" "	T-14256	1979	76%	24%	100%
" "	T-15335	1979	40%	60%	100%
" "	T-17855	1979	80%	20%	100%
" "	T-17886	1979	50%	40%	90%
" "	T-18326	1979	30%	70%	100%
" "	T-20734	1980	100%	0%	100%
<u>Corydalis semper</u> (28 days in KNO <sub>3</sub> )	T-6755	1980	68%	0%	68%
<u>Cupressus atlantica</u> (28 days in H <sub>2</sub> O)*	PI-362090	1970	0%	100%	100%
<u>Datura stramonium</u> (21 days in H <sub>2</sub> O)*	T-14264	1979	100%	0%	100%
<u>Desmodium canadense</u> (21 days in H <sub>2</sub> O)	T-11751	1981	52%	48%	100%
<u>Desmodium intortum</u> (21 days in H <sub>2</sub> O)	PI-312129	1980	10%	90%	100%
<u>Desmodium sp.</u> (21 days in H <sub>2</sub> O)**	PI-322505	1980	28%	72%	100%
<u>Dianthus armeria</u> (8 days in H <sub>2</sub> O)*	T-1970	1975	28%	24%	52%
" "	T-1970	1976	24%	56%	80%
<u>Dianthus deltoides</u> (8 days in H <sub>2</sub> O)	T-1971	1960	92%	8%	100%
<u>Dianthus sp.</u> (8 days in H <sub>2</sub> O)*	T-6787	1975	80%	8%	88%
"	T-6787	1976	84%	8%	92%
<u>Digitalis purpurea</u> (7 days in H <sub>2</sub> O)	T-6788	1977	12%	88%	100%
" "	T-6788	1980	90%	0%	90%
" "	T-6789	1980	92%	0%	92%
" "	T-10778	1974	0%	96%	96%
" "	T-10780	1978	92%	8%	100%
" "	T-11448	1980	0%	100%	100%
" "	T-12320	1980	88%	12%	100%
" "	T-12321	1980	100%	0%	100%
" "	T-12322	1980	16%	84%	100%
" "	T-14267	1980	100%	0%	100%
" "	T-14815	1980	40%	56%	96%
" "	T-15552	1980	52%	48%	100%
" "	T-15693	1978	0%	100%	100%
" "	T-17679	1978	76%	24%	100%
" "	T-23122	1981	56%	44%	100%
" "	T-23123	1981	52%	48%	100%
<u>Dolichos bicolor</u> (12 days in H <sub>2</sub> O)*	T-10515	1980	100%	0%	100%
<u>Dolichos cembra</u> (7 days in H <sub>2</sub> O)*	T-20752	1981	100%	0%	100%
<u>Dolichos lablab</u> (12 days in H <sub>2</sub> O)	T-10517	1980	100%	0%	100%
" "	T-10518	1980	20%	60%	80%
" "	T-12678	1980	100%	0%	100%
" "	T-13211	1980	100%	0%	100%
" "	T-14829	1981	0%	0%	0%
" "	T-20753	1981	60%	40%	100%
" "	T-23124	1981	100%	0%	100%
" "	T-26204	1981	100%	0%	100%
" "	T-27593	1981	100%	0%	100%
<u>Dolichos leucomelas</u> (12 days in H <sub>2</sub> O)*	T-10519	1980	100%	0%	100%
<u>Dolichos ornatus</u> (12 days in H <sub>2</sub> O)*	T-10520	1980	90%	0%	90%

Species	Accession	Year	Germ.	Hard	Total
<u>Dolichos ornatus</u> (contd.)	T-15345	1981	100%	0%	100%
" "	T-18828	1981	100%	0%	100%
" "	T-20754	1981	100%	0%	100%
<u>Dolichos sesquipedalis</u> (12 days in H <sub>2</sub> O)*	T-10521	1980	100%	0%	100%
<u>Dolichos zebra</u> (12 days in H <sub>2</sub> O)*	T-24009	1981	100%	0%	100%
<u>Echinacea angustifolia</u> (12 days in H <sub>2</sub> O)*	T-12679	1979	90%	10%	100%
" "	T-18342	1979	20%	0%	20%
" "	T-18490	1979	30%	70%	100%
<u>Echinacea purpurea</u> (12 days in H <sub>2</sub> O)	T-10706	1979	20%	0%	20%
" "	T-11449	1979	30%	20%	50%
" "	T-12946	1979	80%	0%	80%
" "	T-15346	1979	70%	0%	70%
" "	T-15694	1979	0%	20%	20%
<u>Echinops bannaticus</u> (21 days in H <sub>2</sub> O)	T-12324	1979	0%	0%	0%
" "	T-13133	1979	67%	0%	67%
<u>Elymus sibiricus</u> (21 days in KNO <sub>3</sub> )**	PI-325315	1976	92%	0%	92%
" "	PI-369236	1973	96%	0%	96%
<u>Epilobium adenocaulon</u> (7 days in KNO <sub>3</sub> )**	T-7158	1979	80%	0%	80%
<u>Epilobium angustifolium**</u>	PI-377543	1972	0%	0%	0%
<u>Epilobium hornmanii</u> (21 days in KNO <sub>3</sub> )	T-7159	1979	4%	0%	4%
<u>Epilobium palustre</u> (10 days in H <sub>2</sub> O)**	T-7160	1979	12%	0%	12%
" "	T-7161	1979	16%	0%	16%
" "	T-7162	1979	20%	0%	20%
<u>Gaillardia aristida</u> (10 days in H <sub>2</sub> O)*	T-10711	1980	10%	10%	20%
" "	T-10711	1981	80%	0%	80%
" "	T-10713	1978	20%	0%	20%
" "	T-10713	1980	0%	0%	0%
" "	T-10713	1981	12%	0%	12%
" "	T-10714	1980	0%	0%	0%
" "	T-10714	1981	16%	0%	16%
" "	T-10715	1981	20%	0%	20%
" "	T-16604	1978	20%	0%	20%
<u>Gaillardia pulchella</u> (10 days in H <sub>2</sub> O)	T-6810	1979	64%	0%	64%
<u>Gilia achillefolia</u> (21 days in KNO <sub>3</sub> )**	T-7166	1979	56%	0%	56%
<u>Gilia capitata</u> (21 days in KNO <sub>3</sub> )	T-6811	1979	60%	0%	60%
<u>Glycine ussuriensis</u> (16 days in H <sub>2</sub> O)**	PI-163453	1979	100%	0%	100%
<u>Glycine wightii</u> (16 days in H <sub>2</sub> O)	PI-317896	1979	0%	100%	100%
<u>Haynaldia villosa</u> (7 days in H <sub>2</sub> O)	PI-368885	1979	96%	0%	96%
<u>Helianthus maximiliani</u> (7 days in H <sub>2</sub> O)	PI-434061	1970	0%	24%	24%
" "	PI-434062	1971	20%	48%	68%
<u>Helictotrichon pubescens</u> (28 days in H <sub>2</sub> O, KNO <sub>3</sub> )**	PI-413794	1979	0%	0%	0%
<u>Heliopsis scilianthoides</u>	PI-421379	1973	76%	24%	100%
" "	PI-421379	1974	84%	16%	100%
" "	PI-421379	1975	96%	4%	100%
<u>Hesperis matronalis</u> (8 days in H <sub>2</sub> O)	T-10859	1981	76%	24%	100%
" "	T-10861	1981	44%	48%	92%
" "	T-10862	1981	92%	0%	92%



Species	Accession	Year	Germ.	Hard	Total	Species	Accession	Year	Germ.	Hard	Total
<u>Hesperis matronalis</u> (contd.)	T-11022	1981	88%	12%	100%	<u>Juncus gerardi</u> (28 days in H <sub>2</sub> O)**	PI-269840	1965	44%	56%	100%
" "	T-11495	1981	84%	16%	100%	<u>Juncus maritimus</u> (28 days in H <sub>2</sub> O)**	PI-351149	1969	100%	0%	100%
" "	T-11690		36%	60%	96%	" "	PI-351149	1972	100%	0%	100%
" "	T-11690	1981	44%	52%	96%	" "	PI-365438	1970	72%	28%	100%
" "	T-12347	1981	76%	24%	100%	" "	PI-365438	1974	64%	36%	100%
" "	T-12971		20%	80%	100%	" "	PI-365438	1975	72%	28%	100%
" "	T-12971	1981	84%	16%	100%	" "	PI-365430	1976	16%	84%	100%
" "	T-13889	1978	80%	10%	90%	<u>Juncus sp.</u> (21 days in H <sub>2</sub> O)**	PI-380883	1972	4%	96%	100%
" "	T-14068	1978	80%	20%	100%	" "	PI-380883	1977	24%	76%	100%
" "	T-14617	1979	48%	48%	96%	" "	PI-380883	1980	100%	0%	100%
" "	T-16399	1978	60%	40%	100%	" "	PI-380883	1981	20%	0%	20%
" "	T-16607	1978	90%	10%	100%	<u>Kochia brevifolia</u> (6 days in H <sub>2</sub> O)*	PI-321389	1966	0%	0%	0%
" "	T-18015	1979	40%	50%	90%	" "	PI-330674	1967	0%	0%	0%
" "	T-18496	1979	20%	80%	100%	<u>Kochia georgei</u> (6 days in H <sub>2</sub> O)*	PI-330673	1967	0%	0%	0%
" "	T-18633	1979	100%	0%	100%	<u>Kochia indica</u> (6 days in H <sub>2</sub> O)*	PI-330674	1967	0%	0%	0%
" "	T-18697	1979	0%	100%	100%	<u>Kochia prostrata</u> (6 days in H <sub>2</sub> O)*	PI-256818	1970	0%	0%	0%
" "	T-20766	1980	60%	40%	100%	" "	PI-330708	1967	0%	0%	0%
" "	T-22195	1981	70%	20%	90%	" "	PI-356819	1970	0%	0%	0%
<u>Hypericum androsaemum</u> (21 days in H <sub>2</sub> O)**	PI-345989	1972	0%	100%	100%	" "	PI-356820	1970	0%	0%	0%
<u>Hypericum chinense</u> (21 days in H <sub>2</sub> O)**	PI-344584	1968	0%	100%	100%	" "	PI-356821	1970	0%	0%	0%
" "	PI-344585	1970	0%	100%	100%	" "	PI-356822	1970	0%	0%	0%
<u>Hypericum erectum</u> (21 days in H <sub>2</sub> O)**	PI-246765	1957	0%	100%	100%	" "	PI-356824	1970	0%	0%	0%
" "	PI-246765-0	1959	0%	100%	100%	" "	PI-356825	1970	0%	0%	0%
" "	PI-246765-SGH	1959	0%	100%	100%	<u>Larix decidua</u> (21 days in H <sub>2</sub> O)	T-16403	1979	0%	100%	100%
<u>Hypericum hirsutum</u> (21 days in H <sub>2</sub> O)**	PI-345991	1968	48%	52%	100%	<u>Linum perenne</u> (14 days in KNO <sub>3</sub> )	T-2180	1972	0%	80%	80%
" "	PI-345991	1971	36%	64%	100%	" "	T-11519	1980	10%	90%	100%
<u>Hypericum montanum</u> (21 days in H <sub>2</sub> O)**	PI-345993	1967	0%	100%	100%	" "	T-11697	1980	4%	96%	100%
<u>Hypericum perforatum</u> (21 days in H <sub>2</sub> O)**	PI-345994	1968	64%	36%	100%	" "	T-11756	1980	90%	10%	100%
" "	PI-345994	1971	28%	72%	100%	" "	T-12364	1978	72%	28%	100%
" "	PI-345995	1967	28%	72%	100%	" "	T-12365	1979	4%	96%	100%
<u>Hypericum repens</u> (21 days in H <sub>2</sub> O)**	PI-348867	1969	40%	60%	100%	" "	T-12982	1979	72%	28%	100%
<u>Hypericum rhodopaeum</u> (21 days in H <sub>2</sub> O)**	PI-344585	1971	16%	84%	100%	" "	T-12984	1980	100%	0%	100%
<u>Hypericum rumelicum</u> (21 days in H <sub>2</sub> O)**	PI-345996	1972	24%	64%	88%	" "	T-14075	1980	50%	50%	100%
<u>Hypericum tetrapterum</u> (21 days in H <sub>2</sub> O)**	PI-345997	1968	0%	100%	100%	" "	T-14512	1978	10%	80%	90%
" "	PI-345997	1970	100%	0%	100%	" "	T-16608	1978	90%	10%	100%
<u>Hypericum sp.</u> (21 days in H <sub>2</sub> O)**	PI-315703	1968	60%	40%	100%	<u>Linum perenne ssp. alpinum</u> (14 days in KNO <sub>3</sub> )	T-14176	1980	20%	80%	100%
" "	PI-345998	1968	8%	88%	96%	<u>Linum perenne ssp. anglicum</u> (14 days in KNO <sub>3</sub> )	T-12983	1980	40%	60%	100%
" "	PI-345998	1979	36%	0%	36%	<u>Linum lewisii</u> (14 days in KNO <sub>3</sub> )*	PI-445972	1981	4%	96%	100%
<u>Hypochoeris radicata</u> (28 days in KNO <sub>3</sub> )**	T-6820	1979	12%	0%	12%	<u>Liquidamber styraciflua</u> (28 days in H <sub>2</sub> O)	T-16639	1970	0%	0%	0%
" "	T-6821	1979	48%	0%	48%	" "	T-16640	1970	0%	0%	0%
" "	T-6822	1979	32%	0%	32%	<u>Lobelia cardinalis</u> (10 days in H <sub>2</sub> O)	T-6927	1972	20%	80%	100%
" "	T-6823	1979	76%	0%	76%	" "	T-10933	1979	40%	60%	100%
<u>Impatiens biflora</u> (18 days in KNO <sub>3</sub> )*	T-10924	1978	0%	40%	40%	" "	T-10933	1981	96%	0%	96%
<u>Impatiens capensis</u> (18 days in KNO <sub>3</sub> )*	T-15352	1979	0%	0%	0%	" "	T-24013	1980	80%	10%	90%
<u>Impatiens noli-tangere</u> (18 days in KNO <sub>3</sub> )*	T-10925	1979	0%	0%	0%	<u>Lobelia fulgens</u> (10 days in H <sub>2</sub> O)*	T-13959	1980	50%	50%	100%
" "	T-11510	1979	0%	0%	0%	" "	T-20774	1980	60%	40%	100%
" "	T-15573	1979	0%	0%	0%	" "	T-22202	1981	10%	90%	100%
<u>Iris sp.</u> (18 days in H <sub>2</sub> O)*	PI-383670	1973	0%	100%	0%	<u>Lychnis chalcedonica</u> (14 days in H <sub>2</sub> O)	T-7184	1972	24%	76%	100%
						" "	T-7184	1975	100%	0%	100%



Species	Accession	Year	Germ.	Hard	Total	Species	Accession	Year	Germ.	Hard	Total
<u>Lychnis chalredonica</u> (contd.)	T-10315	1979	28%	72%	100%	<u>Pinus elliotii densa</u> (28 days in H <sub>2</sub> O)*	T-13793	1959	0%	100%	100%
" "	T-11624	1980	72%	28%	100%	<u>Pinus mugo turra</u> (14 days in H <sub>2</sub> O)	T-16499	1979	60%	40%	100%
" "	T-13038	1980	90%	10%	100%	<u>Pinus nigra</u> (14 days in H <sub>2</sub> O)	T-13792	1979	44%	56%	100%
" "	T-13960	1980	90%	10%	100%	<u>Pinus rigida</u> (14 days in H <sub>2</sub> O)	T-16501	1979	60%	40%	100%
" "	T-14077	1980	0%	100%	100%	<u>Pinus sylvestris</u> (14 days in H <sub>2</sub> O)	T-13789	1979	16%	84%	100%
" "	T-14281	1980	70%	30%	100%	" "	T-16503	1979	64%	36%	100%
" "	T-14633	1978	60%	40%	100%	" "	T-343946	1968	0%	100%	100%
" "	T-15582	1979	76%	24%	100%	" "	T-343948	1968	10%	90%	100%
" "	T-15947	1979	24%	76%	100%	" "	T-343949	1968	10%	90%	100%
<u>Macroptilium atropurpureum</u> (10 days in H <sub>2</sub> O)*	T-12739	1980	4%	96%	100%	<u>Pinus faeda</u> (28 days in H <sub>2</sub> O)	T-7384	1979	32%	52%	84%
" "	PI-298624	1979	0%	100%	100%	" "	T-13788	1979	16%	48%	64%
" "	PI-300997	1979	32%	68%	100%	" "	T-18790	1979	52%	48%	100%
" "	PI-322575	1979	8%	92%	100%	" "	T-18791	1979	56%	44%	100%
" "	PI-322576	1979	4%	96%	100%	<u>Pinus thunbergii</u> (21 days in H <sub>2</sub> O)	T-13787	1970	8%	92%	100%
" "	PI-322577	1979	4%	96%	100%	<u>Pinus virginiana</u> (21 days in H <sub>2</sub> O)	T-13786	1969	36%	64%	100%
" "	PI-322578	1979	0%	100%	100%	<u>Piptochaetium</u> sp. (21 days in H <sub>2</sub> O)**	PI-368991	1979	0%	100%	100%
" "	PI-322581	1979	4%	96%	100%	<u>Poa alpina</u> (28 days in KNO <sub>3</sub> )*	PI-284551	1979	70%	0%	70%
<u>Malva moschata</u> (28 days in H <sub>2</sub> O)**	T-6978	1979	20%	64%	84%	<u>Poa kelloggii</u> (21 days in H <sub>2</sub> O)*	T-7198	1979	100%	0%	100%
" "	T-6979	1980	28%	56%	84%	<u>Poa nemoralis</u> (28 days in H <sub>2</sub> O)**	T-7054	1979	88%	0%	88%
" "	T-6981	1979	16%	0%	16%	<u>Portulacaria afra</u> (7 days in H <sub>2</sub> O)	PI-407530	1975	32%	0%	32%
<u>Nemophila menziesii</u> (21 days in KNO <sub>3</sub> )**	T-7189	1979	10%	70%	80%	" "	PI-407531	1975	20%	0%	20%
" "	T-7190	1979	0%	70%	70%	<u>Psoralea bituminosa</u> (28 days in H <sub>2</sub> O)**	PI-283966	1980	20%	80%	100%
" "	T-7191	1979	0%	100%	100%	" "	PI-288352	1980	50%	50%	100%
<u>Papaver rhoeas</u> (21 days in H <sub>2</sub> O)**	T-7031	1979	100%	0%	100%	<u>Reseda alba</u> (10 days in H <sub>2</sub> O)*	PI-348874	1971	90%	10%	100%
" "	T-7032	1979	90%	10%	100%	<u>Reseda lutea</u> (10 days in H <sub>2</sub> O)*	PI-420257	1977	40%	60%	100%
" "	T-7033	1979	90%	10%	100%	" "	PI-420257	1980	68%	32%	100%
<u>Paspalum dilatatum</u> (21 days in KNO <sub>3</sub> )	T-10490	1980	6%	0%	6%	<u>Reseda luteola</u> (10 days in H <sub>2</sub> O)*	T-13916	1979	92%	8%	100%
" "	T-10491	1980	3%	80%	83%	" "	T-17923	1979	80%	20%	100%
<u>Paspalum plicatulum</u> (21 days in KNO <sub>3</sub> )*	PI-339896	1979	12%	0%	12%	" "	T-18039	1979	12%	88%	100%
" "	PI-339897	1979	0%	0%	0%	" "	T-18053	1979	60%	40%	100%
<u>Picea abies</u> (16 days in H <sub>2</sub> O)	T-11545	1980	0%	100%	100%	" "	T-20908	1980	92%	8%	100%
" "	T-11629	1980	50%	50%	100%	" "	T-20909	1980	80%	20%	100%
" "	T-14195	1980	40%	60%	100%	" "	T-20910	1980	76%	24%	100%
" "	T-16425	1980	0%	100%	100%	" "	T-20911	1980	96%	4%	100%
<u>Picea engelmannii</u> (16 days in KNO <sub>3</sub> )	T-8854	1979	44%	56%	100%	" "	T-20912	1980	80%	20%	100%
" "	T-26244	1981	10%	90%	100%	" "	T-20913	1980	100%	0%	100%
<u>Picea glauca</u> (21 days in H <sub>2</sub> O)	T-11630	1980	8%	92%	100%	" "	T-20914	1980	76%	24%	100%
" "	T-14196	1980	0%	100%	100%	" "	T-20995	1980	12%	88%	100%
<u>Picea pungens</u> (16 days in H <sub>2</sub> O)	T-11546	1980	0%	100%	100%	" "	T-21629	1980	56%	44%	100%
" "	T-14085	1980	0%	100%	100%	" "	T-21630	1980	0%	100%	100%
" "	T-26245	1981	0%	100%	100%	" "	T-26308	1981	44%	56%	100%
<u>Pinus brutia</u> (28 days in H <sub>2</sub> O)*	PI-362153	1971	80%	20%	100%	" "	T-27156	1981	96%	4%	100%
<u>Pinus elliotii</u> (28 days in H <sub>2</sub> O)	T-18766	1979	50%	50%	100%	<u>Reseda luteola</u> ssp. <u>bussonei</u> (10 days in H <sub>2</sub> O)*	T-22130	1981	4%	96%	100%
" "	T-18767	1979	80%	20%	100%	<u>Reseda scoparia</u> (10 days in H <sub>2</sub> O)*	T-14005	1981	88%	12%	100%
" "	T-18768	1979	60%	40%	100%	<u>Rhododendron camtschaticum</u> (21 days in H <sub>2</sub> O)	T-14208	1980	20%	80%	100%
" "	T-18769	1979	76%	24%	100%	" "	T-14532	1978	0%	100%	100%
" "	T-18770	1979	100%	0%	100%	<u>Rhododendron schlippenbachii</u> (21 days in H <sub>2</sub> O)	T-18966	1979	10%	90%	100%
" "	T-18771	1979	80%	20%	100%						
" "	T-18772	1979	52%	48%	100%						
" "	T-18773	1979	84%	16%	100%						

Species	Accession	Year	Germ.	Hard	Total	Species	Accession	Year	Germ.	Hard	Total
<u>Rhododendron schlippenbachii</u> (contd.)	T-22714	1981	0%	100%	100%	<u>Salvia splendens</u> (14 days in H <sub>2</sub> O)*	T-14007	1980			
" "	T-22715	1981	0%	100%	100%	<u>Salvia verticillata</u> (14 days in H <sub>2</sub> O)*	P1-380900	1972	8%	0%	8%
<u>Rubus fruticosus</u> (30 days in H <sub>2</sub> O)	T-18857	1980	0%	100%	100%	" "	P1-380900	1978	0%	0%	0%
<u>Rudbeckia hirta</u> (14 days in KNO <sub>3</sub> )**	T-7082	1970	84%	16%	100%	" "	P1-380930	1972	16%	0%	16%
" "	T-7083	1966	40%	56%	96%	" "	P1-380930	1975	8%	0%	8%
" "	T-7083	1976	92%	8%	100%	<u>Silene armeria</u> (7 days in H <sub>2</sub> O)*	T-7091	1979	92%	8%	100%
" "	T-10737	1979	30%	70%	100%	<u>Stylosanthes fruticosa</u> (10 days in H <sub>2</sub> O)**	P1-400309	1978	8%	84%	92%
" "	T-10737	1980	84%	16%	100%	<u>Tagetes erecta</u> (7 days in H <sub>2</sub> )	T-10743	1978	48%	0%	48%
" "	T-10738	1979	100%	0%	100%	" "	T-10743	1979	96%	0%	96%
" "	T-10738	1980	92%	8%	100%	" "	T-10743	1980	80%	0%	80%
" "	T-11180	1980	72%	28%	100%	" "	T-10744	1980	92%	0%	92%
" "	T-15624	1979	90%	10%	100%	" "	T-11571	1980	60%	0%	60%
" "	T-15772	1978 *	0%	100%	100%	" "	T-11720	1980	60%	0%	60%
" "	T-18393	1979	100%	0%	100%	" "	T-12463	1980	92%	0%	92%
" "	T-27159	1981	60%	40%	100%	" "	T-13103	1980	72%	0%	72%
<u>Rudbeckia purpurea</u> (14 days in KNO <sub>3</sub> )**	T-6795	1973	0%	0%	0%	" "	T-14760	1980	60%	0%	60%
" "	T-10739	1978	30%	70%	100%	" "	T-14888	1980	100%	0%	100%
" "	T-23132	1981	60%	40%	100%	" "	T-15421	1980	40%	0%	40%
<u>Rudbeckia solvante</u> (14 days in KNO <sub>3</sub> )**	T-2209	1974	56%	44%	100%	" "	T-15637	1980	80%	0%	80%
<u>Rudbeckia sullivantii</u> (14 days in KNO <sub>3</sub> )**	T-	1975	16%	0%	16%	" "	T-16635	1980	100%	0%	100%
<u>Rumex conferta</u> (14 days in H <sub>2</sub> O)*	T-21299	1980	24%	76%	100%	" "	P1-350689	1970	60%	0%	60%
<u>Rumex sp.</u> (14 days in H <sub>2</sub> O)*	P1-381014	1972	40%	60%	100%	" "	P1-350689	1971	52%	0%	52%
<u>Salvia aegyptiaca</u> (14 days in H <sub>2</sub> O)*	T-14369	1980	80%	20%	100%	" "	P1-350690	1969	50%	0%	50%
<u>Salvia azurea</u> (14 days in H <sub>2</sub> O)*	T-15625	1979	40%	60%	100%	" "	P1-350690	1971	52%	0%	52%
<u>Salvia dominica</u> (14 days in H <sub>2</sub> O)*	T-14370	1980	0%	100%	100%	" "	P1-350691	1969	80%	0%	80%
<u>Salvia eigii</u> (14 days in H <sub>2</sub> O)*	T-14371	1980	20%	80%	100%	" "	P1-350691	1971	36%	0%	36%
<u>Salvia fruticosa</u> (14 days in H <sub>2</sub> O)*	T-14372	1980	10%	90%	100%	" "	P1-350692	1969	70%	0%	70%
<u>Salvia hierosolymitana</u> (14 days in H <sub>2</sub> O)*	T-14373	1980	90%	10%	100%	" "	P1-350692	1971	44%	0%	44%
<u>Salvia hispanica</u> (14 days in H <sub>2</sub> O)*	T-2139	1970	70%	30%	100%	" "	P1-372359	1977	100%	0%	100%
" "	T-2139	1971	44%	56%	100%	" "	P1-372359	1979	88%	0%	88%
<u>Salvia judaica</u> (14 days in H <sub>2</sub> O)*	T-14375	1980	0%	100%	100%	<u>Tagetes lemmonii</u> (7 days in H <sub>2</sub> O)	P1-390235	1974	0%	0%	0%
<u>Salvia lanigera</u> (14 days in H <sub>2</sub> O)*	T-14376	1980	0%	100%	100%	<u>Tagetes lucida</u> (7 days in H <sub>2</sub> O)	P1-350693	1969	0%	0%	0%
<u>Salvia microstigia</u> (14 days in H <sub>2</sub> O)*	T-14377	1980	10%	90%	100%	" "	P1-390236	1974	36%	0%	36%
<u>Salvia nemorosa</u> (14 days in H <sub>2</sub> O)*	P1-380929	1973	44%	0%	44%	<u>Tagetes minuta</u> (7 days in H <sub>2</sub> O)	P1-350694	1969	0%	0%	0%
<u>Salvia patens</u> (14 days in H <sub>2</sub> O)*	T-13967	1980	30%	70%	100%	" "	P1-350694	1971	17%	0%	0%
<u>Salvia pinnata</u> (14 days in H <sub>2</sub> O)*	T-14379	1980	0%	100%	100%	<u>Tagetes patula</u> (7 days in H <sub>2</sub> O)	T-10745	1980	96%	0%	96%
<u>Salvia pitcheri</u> (14 days in H <sub>2</sub> O)*	P1-421551	1972	16%	84%	100%	" "	T-10746	1979	80%	0%	80%
" "	P1-421551	1973	16%	84%	100%	" "	T-10747	1980	80%	0%	80%
" "	P1-421551	1974	28%	72%	100%	" "	T-10753	1980	96%	0%	96%
" "	P1-421551	1975	32%	68%	100%	" "	T-10756	1980	84%	0%	84%
" "	P1-421551	1976	52%	48%	100%	" "	T-11572	1980	40%	0%	40%
<u>Salvia samuelssonii</u> (14 days in H <sub>2</sub> O)*	T-14380	1980	0%	100%	100%	" "	T-13104	1980	100%	0%	100%
<u>Salvia sclarea</u> (14 days in H <sub>2</sub> O)*	T-13968	1980	0%	100%	100%	" "	T-14761	1980	90%	0%	90%
<u>Salvia spinosa</u> (14 days in H <sub>2</sub> O)*	T-14381	1980	0%	100%	100%	" "	T-15777	1980	40%	0%	40%
						" "	T-20712	1980	100%	0%	100%
						" "	T-23138	1981	80%	0%	80%
						" "	P1-350695	1969	40%	0%	40%
						" "	P1-350695	1971	0%	0%	0%
						" "	P1-350696	1969	8%	0%	8%
						" "	P1-350696	1971	12%	0%	12%
						" "	P1-350697	1969	0%	0%	0%
						" "	P1-350697	1971	10%	0%	10%

Species	Accession	Year	Germ.	Hard	Total	Species	Accession	Year	Germ.	Hard	Total
<u>Tagetes patula</u> (contd.)	PI-350697	1979	24%	0%	24%	<u>Veronica incana</u> (16 days in H <sub>2</sub> O)*	PI-346057	1968	0%	100%	100%
" "	PI-350698	1969	20%	0%	20%	" "	PI-346057	1971	16%	84%	100%
" "	PI-350698	1971	44%	0%	44%	" "	PI-434495	1959	0%	100%	100%
" "	PI-372360	1973	28%	0%	28%	" "	PI-434495	1962	0%	100%	100%
<u>Tagetes patula nana</u> (7 days in H <sub>2</sub> O)	T-10768	1979	56%	0%	56%	<u>Veronica longifolia</u> (16 days in H <sub>2</sub> O)	PI-346058	1968	0%	84%	84%
" "	T-10769	1979	70%	0%	70%	" "	PI-346058	1971	0%	92%	92%
<u>Tagetes tenuifolia</u> (7 days in H <sub>2</sub> O)	PI-350699	1969	0%	0%	0%	" "	PI-346059	1968	0%	96%	96%
" "	PI-350700	1969	0%	0%	0%	<u>Veronica longifolia</u> var. <u>maritima</u> (16 days in H <sub>2</sub> O)	PI-292833	1962	0%	96%	96%
<u>Teramnus labialis</u> (21 days in H <sub>2</sub> O)**	PI-406170	1979	44%	52%	96%	<u>Veronica missurica</u> (16 days in H <sub>2</sub> O)*	PI-386011	1975	68%	0%	68%
<u>Themeda triandra</u> (21 days in H <sub>2</sub> O)**	PI-410373	1979	60%	40%	100%	<u>Veronica officinalis</u> (16 days in H <sub>2</sub> O)*	T-13754	1959	0%	100%	100%
<u>Thuja occidentalis</u> (21 days in H <sub>2</sub> O)	T-18597	1980	48%	0%	48%	<u>Veronica persica</u> (16 days in H <sub>2</sub> O)*	PI-292834	1962	80%	20%	100%
" "	T-21305	1980	30%	70%	100%	<u>Veronica praecox</u> (16 days in H <sub>2</sub> O)*	PI-292835	1962	0%	100%	100%
" "	T-21306	1980	0%	0%	0%	<u>Veronica serpyllifolia</u> (16 days in H <sub>2</sub> O)*	PI-346061	1968	0%	100%	100%
" "	T-21307	1980	48%	0%	48%	<u>Veronica sibirica</u> (16 days in H <sub>2</sub> O)*	PI-292836	1962	0%	100%	100%
" "	T-21308	1980	0%	0%	0%	<u>Veronica leucurium</u> (16 days in H <sub>2</sub> O)*	T-13753	1973	44%	36%	80%
" "	T-21309	1980	0%	0%	0%	" "	PI-231584	1971	10%	40%	50%
" "	T-26486	1981	70%	0%	70%	" "	PI-292837	1962	0%	100%	100%
" "	T-26487	1981	40%	0%	40%	" "	PI-346064	1968	0%	100%	100%
" "	T-26488	1981	80%	0%	80%	<u>Veronica virginiana</u> (16 days in H <sub>2</sub> O)*	T-13752	1972	0%	0%	0%
<u>Thuja occidentalis</u> var. <u>malonyana</u> (21 days in H <sub>2</sub> O)	T-23139	1981	12%	0%	12%	<u>Vinca</u> sp. (12 days in H <sub>2</sub> O)*	T-13749	1960	0%	88%	88%
<u>Thuja orientalis</u> var. <u>microcarpa</u> (21 days in H <sub>2</sub> O)	T-14015	1980	0%	10%	10%	<u>Zinnia grandiflora</u> (7 days in H <sub>2</sub> O)*	T-4670	1971	4%	0%	4%
<u>Thuja plicata</u> (21 days in H <sub>2</sub> O)	T-13303	1980	30%	0%	30%	<u>Zornia</u> sp. (28 days in H <sub>2</sub> O, KNO <sub>3</sub> )**	PI-321417	1979	0%	0%	0%
<u>Veronica austriaca</u> (16 days in H <sub>2</sub> O)	PI-292828	1963	60%	0%	60%						
<u>Veronica bachofenii</u> (16 days in H <sub>2</sub> O)*	PI-292829	1962	0%	100%	100%						
<u>Veronica beccabunga</u> (16 days in H <sub>2</sub> O)*	PI-346054	1967	0%	100%	100%						
<u>Veronica chaemaedrys</u> (16 days in H <sub>2</sub> O)*	PI-346055	1968	0%	100%	100%						
<u>Veronica cymbalaria</u> (16 days in H <sub>2</sub> O)*	PI-292830	1962	0%	100%	100%						
" "	PI-292830	1965	0%	100%	100%						
<u>Veronica gentianoides</u> (16 days in H <sub>2</sub> O)*	PI-292831	1962	0%	100%	100%						



APPENDIX XV  
GERMINATION TEST RESULTS  
ON  
'ATLANTIC' COASTAL PANICGRASS





## Germination Test Results on 'Atlantic' Coastal Panicgrass

Seed of 'Atlantic' Coastal panicgrass, Panicum amarulum (PI-421137), from the Cape May Plant Materials Center was germinated under various conditions to determine criteria for testing germination. Four replications of one hundred seeds each were tested on wet double blotters under the following conditions:

Distilled water

Potassium nitrate solution (2%)

Distilled water with prechill

Potassium nitrate solution (2%) with prechill

The seed was germinated at a daytime (eight hours with lights on) temperature of 35° C and a nighttime (sixteen hours with lights off) temperature of 15° C. Prechilled seed was subjected to two weeks of 5° C temperature without lights before exposure to alternate day-night conditions. Seed of three crop years (1978, 1979, 1980) was tested. The prechill started on March 23, 1981; alternate day-night conditions started on April 6, 1981; the final (28-day) count was taken on May 3, 1981.

Average germination percentages are presented in Table 1 by year, treatment, and length of test. Figures followed by the same letter are not significantly different at the 95% confidence level. Significant differences occur on or before the fifteenth day in all treatments.

Germination percentages at 15 days are presented in Table 2. Figures followed by the same letter are not significantly different at the 95% confidence level. The absence of difference among 1978 KNO<sub>3</sub>, 1978 H<sub>2</sub>O, and 1979 H<sub>2</sub>O does not seem as important as the difference between 1978-1979 and 1980, or the difference between 1980 prechilled and non-prechilled.

A gross analysis of the fifteen day germination indicates simply that any 1978-1979 (two to three year old) seed germinated better than 1980 (one year old) seed, and non-prechilled seed germinated better than prechilled. There was a mold problem with the prechilled seed that might account for that difference. Even the amount of hard seed in the non-prechilled (1.125%) was greater than the prechilled (0.37%), suggesting that a good bit of the prechilled seed rotted.

Overall there seems to be no advantage to the use of KNO<sub>3</sub> solution or to prechilling the seed, and no need for a 28-day test period. A 15-day test in water with 35° C daytime (eight hours with light) and 15° C nighttime (sixteen hours without light) temperatures seems adequate.

Table 1. Average Germination Percentages of Four Replications of Panicum amarulum by Crop Year. Duration of Test, and Treatment.

<u>Duration (Days)</u>	<u>H<sub>2</sub>O</u>	<u>KNO<sub>3</sub></u>	<u>Prechill In H<sub>2</sub>O</u>	<u>Prechill In KNO<sub>3</sub></u>	<u>Year</u>
7	80.75 A	81.25 A	75.25 A	77.00 A	1978
10	85.00 AB	88.25 AB	76.75 A	77.25 A	1978
15	88.25 B	90.25 B	79.25 A	78.50 A	1978
21	88.25 B	90.75 B	80.50 A	78.50 A	1978
28	88.25 B	90.75 B	80.50 A	78.50 A	1978
**	***	***	***	***	**
7	79.50 A	75.50 A	75.75 A	78.50 A	1979
10	83.25 AB	80.50 B	78.00 A	81.00 A	1979
15	85.00 B	82.25 B	79.50 A	81.25 A	1979
21	86.50 B	83.25 A	80.25 A	81.25 A	1979
28	86.50 B	83.50 B	80.50 A	81.25 A	1979
**	***	***	***	***	***
7	65.25 A	64.00 A	68.50 A	66.75 A	1980
10	72.25 A	75.00 B	71.50 B	69.75 A	1980
15	77.75 BC	77.25 B	72.75 B	70.75 A	1980
21	78.50 C	79.50 B	72.75 B	71.25 A	1980
28	79.25 C	79.75 B	72.75 B	71.25 A	1980

Table 2. Average Germination Percentages of Four Replications of Panicum amarulum at 15 Days by Crop Year and Treatment.

1978	KNO <sub>3</sub>	90.25 A			
1978	H <sub>2</sub> O	83.25 A			
1979	H <sub>2</sub> O	85.50 A	B		
1979	KNO <sub>3</sub>	82.25	B	C	
1979	PC KNO <sub>3</sub>	81.25	B	C	D
1979	PC KNO <sub>3</sub>	79.50		C	D
1978	PC H <sub>2</sub> O	79.25		C	D E
1978	PC KNO <sub>3</sub>	78.50		C	D E
1980	H <sub>2</sub> O	77.75		D	E
1980	KNO <sub>3</sub>	77.25		D	E
1980	PC H <sub>2</sub> O	72.75			E
1980	PC KNO <sub>3</sub>	70.75			E

Percentages followed by the same letter are not different at the F.05 level of significance.

APPENDIX XVI  
PLANT PERFORMANCE













YR	PI	RC	NUMBER	GENUS	SPECIES	PLOT NUMBER	M M M I F C R T L	SEED DATE	EMERG DATE	PRP BY	TRANS DATE	R R R R R D I C H D I N O E R	FOL V	BLOOM I	DATE	SEED MAT	PCT SRV	DORM DATE	CODE
*																			
***																			
*	80		12700T	LOLIUM	PERENNE	C/1/182	0 1 1	03/25		SEED			12 4			09/08			
*	80		12701T	LOLIUM	PERENNE	C/2/637	0 1 1	03/25		SEED			35 2						
*	80		12702T	LOLIUM	PERENNE	C/3/384	0 1 1	03/25		SEED			20 2						
*	80		12703T	LOLIUM	PERENNE	C/5/687	0 1 1	03/25		SEED			20 2						
*	80		12704T	LOLIUM	PERENNE	C/6/384	0 1 1	03/25	04/08	SEED			25 2						
*	80		12706T	LOLIUM	PERENNE	C/9/182	0 1 1	03/25	04/08	SEED			10 7						
*	80		12707T	LOLIUM	PERENNE	I/2/182	0 1 1	03/25	04/01	SEED			25 2			10/21			
*	80		12708T	LOLIUM	PERENNE	I/2/9810	0 1 1	03/25	04/08	SEED			25 2						
*	80		12709T	LOLIUM	PERENNE	I/3/586	0 1 1	03/25	04/08	SEED			25 2			10/21			
*	80		12710T	LOLIUM	PERENNE	I/4/11812	0 1 1	03/25	04/08	SEED			20 2			10/02			
*	80		12711T	LOLIUM	PERENNE	R/9/182	0 1 1	03/25	04/01	SEED			15 7						
*	80		12712T	LOLIUM	PERENNE	B/12/182	0 1 1	03/25	04/08	SEED			20 5			10/06			
*	80		12713T	LOLIUM	PERENNE	I/5/182	0 1 1	03/25	04/08	SEED			25 2			09/09			
*	80		12714T	LOLIUM	PERENNE	I/6/56	0 1 1	03/25	04/01	SEED			20 2						
*	80		12715T	LOLIUM	PERENNE	I/7/11812	0 1 1	03/25	04/01	SEED			25 1			08/25			
*	80		12716T	LOLIUM	PERENNE	E/1/485	0 1 1	03/25	04/08	SEED			15 3						
*	80		12717T	LOLIUM	PERENNE	F/4/182	0 1 1	03/25	04/08	SEED			15 8						
*	80		12718T	LOLIUM	PERENNE	A/1/283	0 1 1	03/25	04/08	SEED			20 3						
*	80		12719T	LOLIUM	PERENNE	A/3/485	0 1 1	03/25	04/08	SEED			20 1			09/29			
*	80		12720T	LOLIUM	PERENNE	A/5/283	0 1 1	03/24	04/08	SEED			15 2			07/30			
*	80		12721T	LOLIUM	PERENNE	A/6/586	0 1 1	03/25	04/08	SEED			20 2			09/15			
*	80		12722T	LOLIUM	PERENNE	I/7/182	0 1 1	03/25	04/08	SEED			20 2						
*	80		12993T	LOLIUM	PERENNE	I/7/687	0 1 1	03/25	04/08	SEED			25 1						
*	80		12729T	LOTUS	PEDUNCULATUS	8/8/3	0 1 1	02/12	02/22	SEED			15 3			07/01			
*	80		11323T	LOTUS	SP	C/7/2	0 1 1	02/12	02/22	SEED			15 1			06/11			
*	80		12730T	LOTUS	TENUIS	C/2/4/485	0 1 1	02/12	02/22	SEED			15 1			06/18			
*	80		12731T	LOTUS	ULIGINOSUS	C/3/586	0 1 1	02/12	02/22	SEED			15 1			07/01			
*	80		12739T	MACROPTILUM	ALTRORPEPUREUM	NGH	0 1 1	02/12	02/22	SEED			2			06/11			
*	80		6979T	MALVA	MOSCHATA	F/3/1	0 1 1	02/13	04/07	SEED			50 3			06/18			
*	80		7628T	MONARDA	FISTULOSA	C/4/788	0 1 1	02/13	04/07	SEED			100 1			08/13			
*	80		10950T	MONARDA	FISTULOSA	I/3/788	0 1 1	03/04	04/07	SEED			45 2						
*	80		10952T	MONARDA	FISTULOSA	R/4/3	0 1 1	03/04	04/07	SEED			40 2						
*	80		12738T	MONARDA	FISTULOSA	A/2/5	0 1 1	03/04	04/07	SEED			45 2						
*	80		10906T	GENOTHERA	BIENNIS	F/8/2	0 1 1	03/04	04/07	SEED			70 1			06/11			
*	80		10490T	PASPALUM	DILATATUM	I/1/8	0 1 1	03/04	04/07	SEED			60 1			08/22			
*	80		10491T	PASPALUM	DILATATUM	C/2/2/384	0 1 1	03/04	04/07	SEED			60 1			08/13			
*	80		10492T	PASPALUM	PROSTRATUM	I/4/384	0 1 1	03/04	03/18	SEED			25 9			08/22			
*	80		10494T	PASPALUM	STOLONIFERUM	C/4/384	0 1 1	03/04	03/18	SEED			20 3			09/08			
*	80		10495T	PASPALUM	VAGINATUM	C/2/6/889	0 1 1	03/04	03/18	SEED			20 1			10/01			
*	80		17143T	PENSTEMON	HI-SUTUS	A/1/5	0 1 1	02/25	04/07	SEED			10 4						
*	80		7196T	PENSTEMON	TOLNIEI	A/5/4	0 1 1			SEED			10 7						
*	80		11169T	PHALARIS	AGUATICA	J/5/1	0 1 1			SEED			15 9			10/01			
*	80		11170T	PHALARIS	AQUATICA	J/3/3	0 1 1			SEED			15 8			10/01			
*	80		10496T	PHALARIS	ARUNDINACEA	C/2/4/283	0 1 1	03/04		SEED			50 3						
*	80		7049T	PLANTAGO	MARITIMA	A/3/3	0 1 1			SEED			15 3						
*	80		7050T	PLANTAGO	MARITIMA	A/2/21	0 1 1			SEED			10 9						







* YR	RC	PI	NUMBER	GENUS	SPECIES	PLOT NUMBER	M M M I F C R T L	SEED DATE	EMERG DATE	PRP BY	TRANS DATE	R R R R R D I C H D 1 N O E R	FOL V	BLOOM DATE	SEED DATE	PCT SRV	DORM DATE	CODE 1
*	81	18447T	MACROPTILIMUM	ATROPURPUREUM	SGH	6-5-485		06/02	06/08	SEED				10/25	12/15			17
*	81	18448T	MACROPTILIMUM	ATROPURPUREUM	SGH	6-6-687		06/02	06/08	SEED				10/20	11/05			30
*	81	18449T	MACROPTILIMUM	ATROPURPUREUM	SGH			06/02		SEED				10/27	11/23			11
*	81	18450T	MACROPTILIMUM	ATROPURPUREUM	SGH			05/28	06/02	SEED				10/25	11/28			59
*	81	18452T	MACROPTILIMUM	ATROPURPUREUM	SGH			05/28	06/02	SEED				10/27	11/15			40
*	81	18453T	MACROPTILIMUM	ATROPURPUREUM	SGH			05/28	06/02	SEED				10/04	11/01			29
*	81	18466T	MEDICAGO	POLYMORPHA	SGH			05/28	06/08	SEED				07/20	08/18			34
*	81	18460T	MEDICAGO	POLYMORPHA	SGH			05/28	06/10	SEED				10/28				7
*	81	18465T	MEDICAGO	POLYMORPHA	SGH			05/28	06/08	SEED								
*	81	18466T	MEDICAGO	POLYMORPHA	SGH			05/28	06/10	SEED								
*	81	22144T	MEDICAGO	POLYMORPHA	SGH			05/28	06/10	SEED								
*	81	20798T	PSATHYKOSTACHYS	JUNCEA				3/12	3/18	SEED								
*	81	21604T	TAENIATHERUM	ASPERUM				3/12	3/17	SEED								
*	81	12466T	TERAMNUS	LABIALIS	SGH			05/28	06/17	SEED								
*	81	18454T	TERAMNUS	LABIALIS	SGH			05/28	06/08	SEED				10/25				
*	81	18455T	TERAMNUS	LABIALIS	SGH			05/28	06/04	SEED				11/10				
*	81	18457T	TERAMNUS	LABIALIS	SGH			05/28	06/10	SEED				12/28				
*	81	440703	TRIFOLIUM	AMEIGUUM		6-3-4		04/01	04/07	SEED				07/10	07/23			2
*	81	440736	TRIFOLIUM	PRATENSE		6-1-4		04/01	04/07	SEED				07/10	07/10			2
*	81	440737	TRIFOLIUM	PRATENSE		6-6-182		04/01	04/07	SEED				07/08	07/31			35
*	81	440738	TRIFOLIUM	PRATENSE		B-5-2		04/01	04/07	SEED				06/26	07/16			5
*	81	440739	TRIFOLIUM	PRATENSE		1-2-11812		04/01	04/07	SEED				07/10	08/07			21
*	81	440740	TRIFOLIUM	PRATENSE		C-4-384		04/01	04/07	SEED				07/10	07/20			51
*	81	440741	TRIFOLIUM	PRATENSE		E-4-384		04/01	04/07	SEED				08/17				1
*	81	440742	TRIFOLIUM	PRATENSE		1-7-9810		04/01	04/07	SEED				07/10	08/07			3
*	81	440743	TRIFOLIUM	PRATENSE		G-4-1		04/01	04/07	SEED				07/10	07/23			25
*	81	440744	TRIFOLIUM	REPENS		G-5-182		04/01	04/07	SEED				06/18	07/10			10
*	81	440745	TRIFOLIUM	REPENS		G-2-485		04/01	04/07	SEED				06/18	07/10			21
*	81	440746	TRIFOLIUM	REPENS		1-5-9		04/01	04/07	SEED				06/18	07/23			4
*	81	440747	TRIFOLIUM	CRACCA		C2-6-1		04/09		SEED				07/31				
*	81	440753	VICIA	CRACCA		C2-3-10		04/09	04/18	SEED								
*	81	440754	VICIA	CRACCA		B-9-5		04/09	04/19	SEED				0	06/26			
*	81	440755	VICIA	CRACCA		C2-9-1		04/09	04/20	SEED								
*	81	440757	VICIA	CRACCA		G-3-7		04/09	04/20	SEED								
*	81	440758	VICIA	CRACCA		G-5-3		04/09	04/20	SEED								
*	81	440759	VICIA	CRACCA				04/09		SEED								
*	81	440760	VICIA	CRACCA				05/28	06/08	SEED				10/27				
*	81	18459T	VIGNA	LUTEOLA	SGH			05/28	06/08	SEED				05/09				
*	81	18460T	VIGNA	LUTEOLA	SGH			05/28	06/08	SEED				10/10				
*	81	18461T	VIGNA	LUTEOLA	SGH			05/28	06/08	SEED								













* RC	PI NUMBER	PLANT SYMBOL	YR PL	IFC RTL	PLING DATE	EMERG DATE	PLANT TYPE	ROOT SYSTEM	VIGOR V REC	STD PCT	FLOWER COLOR	FF TAB	FOL HT	FOL WD	R R R R D I C H D	CLIP WT	FSL MAT	SSS DATE	FIRST CODE
**	81	346968	DAMA*	011	03/12		GRASS	R/D/F/A	4	10/20		22	30	40				344	07/17
*	80	346969	DAMA*	011	03/19		GRASS		9	10/20		39	10	15				08/01	
*	81	346969	DAMA*	011	03/19		GRASS		9	10/20		39	10	15				08/01	
*	80	346970	DAMA*	011	03/19		GRASS		9	10/20		39	10	15				08/01	
*	81	346970	DAMA*	011	03/19		GRASS		9	10/20		39	10	15				08/01	
*	80	104761	DAPO	011	03/04	04/07	GRASS	F/D/F/A	3	10/15		332	20	25			7/08	54	
*	81	104761	DAPO	011	03/04	04/07	GRASS	F/D/F/A	3	10/15		332	20	25			7/08	54	
*	80	114301	DAPO	011	03/04	03/18	GRASS	F/S/F/A	6	10/23		453	20	30			541	08/11	
*	81	114301	DAPO	011	03/04	03/18	GRASS	F/S/F/A	6	10/23		453	20	30			541	08/11	
*	80	125481	DAPO	011	03/04	03/18	GRASS	F/D/F/A	2	10/21		322	30	30			07/07	5	
*	81	125481	DAPO	011	03/04	03/18	GRASS	F/D/F/A	2	10/21		322	30	30			07/07	5	
*	80	126751	PAPO	011	03/04	03/18	GRASS	F/S/F/A	8	10/15		463	15	25			07/10	50	
*	81	126751	PAPO	011	03/04	03/18	GRASS	F/S/F/A	8	10/15		463	15	25			07/10	50	
*	80	104771	DASP2	011	03/04	04/07	GRASS	F/S/F/A	8	10/15		676	10	20			532	07/25	
*	81	104771	DASP2	011	03/04	04/07	GRASS	F/S/F/A	8	10/15		676	10	20			532	07/25	
*	80	67771	DECA5	011	03/07		GRASS	F/S/F/A	7	10/20		22	30	40			06/26	1	
*	81	67771	DECA5	011	03/07		GRASS	F/S/F/A	7	10/20		22	30	40			06/26	1	
*	80	71501	DECAB	011	03/19		GRASS	F/S/F/A	9	10/21		52	20	30			044	07/28	
*	81	71501	DECAB	011	03/19		GRASS	F/S/F/A	9	10/21		52	20	30			044	07/28	
*	80	117511	DECA7	011	03/04	04/07	LEGUME		9	10/29		88	20	10			5	09/17	
*	81	117511	DECA7	011	03/04	04/07	LEGUME		9	10/29		88	20	10			5	09/17	
*	80	67881	DIPU	011			FORB	TA/D/C/	2	10/29		55	30	40			154	06/18	
*	81	67881	DIPU	011			FORB	TA/D/C/	2	10/29		55	30	40			154	06/18	
*	80	67891	DIPU	011			FORB	F/S/F/A	2	10/22	WHITE	12	555	40	30			134	06/25
*	81	67891	DIPU	011			FORB	F/S/F/A	2	10/22	WHITE	12	555	40	30			134	06/25
*	80	105181	DOLAL	011	03/04	03/18	LEGUME		6	10/28		76					142		
*	81	105181	DOLAL	011	03/04	03/18	LEGUME		6	10/28		76					142		
*	80	105191	DOLE	011	03/04	03/18	FORB	TA/D/C/	9	10/21		995	10	15					
*	80	126791	ECAN	011	03/04	03/18	FORB	TA/D/C/	9	10/21		995	10	15					
*	81	126791	ECAN	011	03/04	03/18	FORB	TA/D/C/	9	10/21		995	10	15					
*	80	104781	ELAR	011	03/04	04/07	GRASS	R/D/C/A	4	10/20		866	35	55				08/10	4
*	81	104781	ELAR	011	03/04	04/07	GRASS	R/D/C/A	4	10/20		866	35	55				08/10	4
*	80	104801	ELAR	011	03/04	04/07	GRASS	R/D/C/A	4	10/22		755	45	45				07/06	
*	81	104801	ELAR	011	03/04	04/07	GRASS	R/D/C/A	4	10/22		755	45	45				07/06	
*	80	123261	ELAR	011	03/04	04/07	GRASS	R/D/C/A	1	10/20		732	60	70				07/24	134
*	81	123261	ELAR	011	03/04	04/07	GRASS	R/D/C/A	1	10/20	85	732	60	70				07/24	134
*	80	345978	ELAR	011	03/19		GRASS	R/D/C/F	1	10/29		723	50	55			21	07/24	
*	81	345978	ELAR	011	03/19		GRASS	R/D/C/F	1	10/29	100	723	50	55			21	07/24	
*	80	325315	ELV1	011	03/04	04/07	GRASS	R/O/F/A	8	05/15		54	35	30				07/27	127
*	81	104811	ELV13	011	03/04	04/07	GRASS	R/O/F/A	3	10/21		641	40	40			2		
*	80	104811	ELV13	011	03/04	04/07	GRASS	R/O/F/A	3	10/21		641	40	40				08/81	170
*	81	104811	ELV13	011	03/04	04/07	GRASS	R/O/F/A	3	10/21		641	40	40				08/81	170
*	80	129471	ELV13	011	03/04	04/07	GRASS	F/D/F/A	4	10/15		541	20	30				08/19	151
*	81	129471	ELV13	011	03/04	04/07	GRASS	F/D/F/A	4	10/15		541	20	30				08/19	151
*	80	118051	EPAN2	011	03/04	04/07	FORB	TA/D/C/	6	10/20	PURPLE	21	556	30	35			194	07/17
*	81	118051	EPAN2	011	03/04	04/07	FORB	TA/D/C/	6	10/20	PURPLE	21	556	30	35			194	07/17













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YR	PI	PLANT	YR	IFC	PLTNG	EMERG	PLANT	ROOT	V	REC	STD	FLOWER	FF	FFF	AU	TAB	FOL	FOL	HT	WD	I	N	O	E	R	D	I	C	H	D	CLIP	WT	SSS	FSL	MAT	CODE		
RC	NUMBER	SYMBOL	* PL	RTL	DATE	DATE	TYPE	SYSTEM	I	DATE	PCT	COLOR	BN	XBL	HT	WT	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE		
80	314474	PORE5	011					TA/D/C/	3	10/22				322	20	50																						
81	314474	PORE5															40	60																				
81	7056T	RAAC3															20	30																				
80	7067T	RAAC3	011				FORB	F/S/F/A	4	10/07		YELLOW	74	575	20	20	20	20																				
80	10876T	RAACF*	011				FORB	F/S/F/A	7	10/29			25		25	25	25	25																				
81	10876T	RAACF*															20	25																				
80	7069T	RARE3	011				FORB	R/D/C/A	1	10/22			111		25	70																						
81	7069T	RARE3																																				
81	7069T	RARE3																																				
80	420257	RELU	011					TA/D/C/	2	10/15		YELLOW	1	552	40	20	20	60																				
81	420257	RELU																																				
80	10737T	RUH12	011	03/04	04/07	FORB		F/S/F/A	2	10/14		YELLOW	14	833	50	40	40	30																				
81	10737T	RUH12															45	60																				
80	10738T	RUH12	011	03/04	04/07	FORB		TA/S/C/	4	10/21		YELLOW	12	766	40	40	40	40																				
81	10738T	RUH12																																				
80	11180T	RUH12	011	03/04	04/07	FORB		F/D/F/A	3	10/29		YELLOW	23	551	30	35	35	30																				
81	11180T	RUH12															50	35																				
80	7089T	SAOF4	011				FORB	F/D/F/A	2	10/22			223		40	70	70	110																				
81	7089T	SAOF4																																				
80	7098T	TAVU	011					R/S/C/A	1	10/07		YELLOW	42	221	100	100	100	100																				
81	7098T	TAVU																																				
80	7099T	TAVU	011					R/D/C/F	1	10/22		YELLOW	24	324	60	80	80	80																				
81	7099T	TAVU																																				
81	12466T	TELA		05/28	06/17																																	
80	410370	TEDR*	011					F/D/F/A	2	10/29			311		45	75																						
81	410370	TEDR*																																				
80	297381	TRME	011					R/S/C/A	2	10/07		PINK	92	521	15	55	30	80																				
81	297381	TRME																																				
80	17273T	VIME*		01/08	01/18	LEGUME																																
80	349271	VIME*		01/08	01/18	LEGUME																																
81	7112T	VISE																																				
80	308119	VISE	011					R/D/C/A	6	05/19																												
80	346068	VISE	011					R/D/C/A	3	10/15			422		20	40	30	50																				
81	346068	VISE																																				





